IN THE

United States Court of Appeals

FOR THE SEVENTH CIRCUIT

No. 11906

UNITED MFG. & SERVICE CO.
(Now by change of name
UNILECTRIC, INC.),

Plaintiff (Appellant),

vs.

HOLWIN CORPORATION,

Defendant (Appellee).

Appeal from the United States District Court for the Northern District of Illinois, Eastern Division;
Hon. Win G. Knoch, Judge

APPENDIX TO BRIEF FOR PLAINTIFF (APPELLANT)

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HAMMERSMITH-KORTMEYER CO., MILWAUKEE

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APPENDIX TO BRIEF FOR PLAINTIFF (APPELLANT)

STATEMENT UNDER RULE 16(b) OF THE RULES OF THE COURT OF APPEALS

This action was commenced on December 16, 1949 in the United States District Court for the Northern District of Illinois, Eastern Division, by the filing of a complaint captioned "United Mfg. & Service Co. vs. Holwin Corporation."

Upon plaintiff's motion at trial (November 22, 1955) the Court ordered leave to plaintiff to show its name in the title hereof as having been changed to "Unilectric, Inc." subsequently to the commencement of the action.

An amendment to the complaint was filed on January 3, 1950. Defendant's answer and counterclaim was filed on February 10, 1950. Plaintiff filed a motion to dismiss defendant's counterclaim on March 6, 1950. On June 29, 1950 the Court, by Judge Philip L. Sullivan, read an opinion granting plaintiff's motion and on June 30, 1950 an order was entered pursuant to said opinion, dismissing the counterclaim. Defendant filed a notice of appeal from said order on July 28, 1950. On April 3, 1951 the United States Court of Appeals for the Seventh Circuit rendered an opinion reversing the decision of the District Court on the motion, and the mandate issued April 30, 1951. The plaintiff's reply to the counterclaim was filed April 9, 1951.

Trial was had to the Court, Hon. Win G. Knoch, District Judge, on November 22, 1955; and on August 2, 1956 the Court entered Findings of Fact and Conclusions of Law. Final judgment was entered September 17, 1956, and notice of appeal was filed September 27, 1956. By the final judgment the cause was referred to Ferre C. Watkins as Special Master for accounting of damages.

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COMPLAINT

[Filed December 16, 1949]

4 To the Honorable, the Judges of the United States District Court for the Northern District of Illinois, Eastern Division:

The plaintiff, United Mfg. & Service Co., presents this, its cause of action against defendant, Holwin Corporation, and alleges as follows:

I. Plaintiff.

The plaintiff, United Mfg. & Service Co., is a corpora-
5 tion organized and existing under and by virtue of the laws of the State of Wisconsin and having an office and place of business at 405 South Sixth Street in the City of Milwaukee, County of Milwaukee, State of Wisconsin.

II. Defendant.

The defendant, Holwin Corporation, is a corporation organized and existing under and by virtue of the laws of the State of Illinois and having an office and place of business at 1049 North Paulina in the City of Chicago, County of Cook, State of Illinois.

III. Jurisdiction.

(a) This is a suit for declaratory judgment and for further relief under Sections 2201 and 2202 of Title 28 U.S.C.A., and arises under the patent laws of the United States, there being an actual controversy between plaintiff and defendant as to the alleged infringement by plaintiff of Letters Patent No. 2,466,636 owned by defendant.

(b) There is a diversity of citizenship between the parties and the amount in controversy is more than three thousand dollars ($3000) exclusive of costs and interest.

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IV. Title to Patent.

On February 1, 1949, United States Letters Patent No. 2,460,636 were issued to Charles M. Holloway. All of the right, title and interest in and to said Letters Patent has been assigned to, and is now in, defendant, Holwin Corporation.

V. Unfair Competition.

(a) On or about October 15, 1948 plaintiff began the manufacture of angle sockets for refrigerator lights. Exhibit A, attached hereto and made a part hereof, is a photograph of the type of socket manufactured and sold by plaintiff from October 15, 1948 to September 16, 1949. Plaintiff first learned of sockets of the Exhibit A type from Westinghouse Electric Corporation and subsequently from Seeger Refrigerator Company of Evansville, Indiana, both of whom furnished plaintiff with blueprints of drawings of such sockets with the expectation that plaintiff would manufacture and supply the same to them. Defendant knew of plaintiff's negotiations with Westinghouse and Seeger, but at the time of the negotiations with Westinghouse defendant did not in any wise inform plaintiff that there was any patent application on file or in course of preparation covering such sockets; and at the time of plaintiff's negotiations with Seeger defendant informed plaintiff of the pendency of an application for Letters Patent to Holloway but led plaintiff to believe
7 that said application was directed to certain entirely different internal structural features than are covered by the claims of the aforesaid Letters Patent to Holloway or the application therefor then pending. Plaintiff thereupon designed the socket it proposed to sell to Seeger to eliminate said internal structural features.

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(b) On February 1, 1949 the aforesaid Letters Patent to Holloway issued, and under date of April 12, 1949 defendant charged plaintiff with infringement thereof on account of plaintiff's manufacture of Exhibit A type sockets and sale of the same to the aforesaid Seeger Refrigerator Company. In order to avoid embarrassment to its customer, Seeger Refrigerator Company, plaintiff, on June 16, 1949, entered into a limited license agreement with defendant, restricted to sale of the patented (Exhibit A type) sockets to said Seeger Refrigerator Company.

(c) Plaintiff has never in any wise acknowledged the validity of the said patent to Holloway but entered into said license agreement solely to maintain the good will of its customer, said Seeger Refrigerator Company.

(d) Promptly upon learning of the issuance of the Holloway patent and of its nature and scope, plaintiff began the design of a non-infringing type of socket which did not come within the scope of any claim of the said Holloway patent, which socket is illustrated by the photo-
8 graph, Exhibit B, attached hereto and made a part hereof. Plaintiff advised defendant that it would continue to manufacture and sell the patented (Exhibit A type) socket and pay royalties thereon if the royalty rate provided by said agreement of June 16, 1949 were reduced to a reasonable sum, but that plaintiff intended to manufacture and sell only sockets of the non-infringing Exhibit B type if the unreasonably high royalties provided by the license agreement were not substantially reduced. Defendant would not consent to a reduction of said royalty rate.

(e) Defendant thereupon began a campaign of intimidation against plaintiff's customers and prospective customers, representing that plaintiff's Exhibit B type socket

infringed the claims of the Holloway patent and threatening to bring suit against any party purchasing said Exhibit B type sockets from plaintiff. Such representations and threats were made to the following named customers and prospective customers of plaintiff:

Seeger Refrigerator Company, Evansville, Indiana

Crossley Division of the AVCO Manufacturing Corporation, Cincinnati, Ohio

Sears, Roebuck & Co., Chicago, Illinois

9 and others not now known to plaintiff but whose names and addresses plaintiff prays leave to insert in this complaint by amendment when the same are ascertained.

(f) On November 14, 1949, defendant, through its attorneys, wrote to plaintiff's customer, Seeger Refrigerator Company of Evansville, Indiana, charging said Seeger Refrigerator Company with infringement of the Holloway patent on account of the purchase by it of plaintiff's Exhibit B type sockets. Copy of said letter is attached hereto and made a part hereof as Exhibit C. In response to this letter, plaintiff, under date of November 29, 1949, wrote to defendant's attorneys and warned them that persistence in such tactics would compel plaintiff to bring a declaratory judgment against defendants.

(g) Under date of November 25, 1949, defendant's attorneys wrote to Sears, Roebuck & Company at Chicago charging Sears, Roebuck & Company with infringement of the said Holloway patent on account of the purchase of refrigerators from Seeger Refrigerator Company, which refrigerators embodied Exhibit B type sockets supplied by plaintiff. A copy of said letter is attached hereto and made a part hereof as Exhibit D.

(h) Defendant is in the business of manufacturing and
10 selling angle sockets for refrigerator lights, and sells the same in the same trade channels in which plaintiff sells its Exhibit B sockets, and in direct competition with plaintiff.

(i) Plaintiff is informed and believes, and therefore alleges, that defendant's representations to the trade that plaintiff's Exhibit B type sockets infringe the claims of said Letters Patent to Holloway made it difficult, and in some cases impossible, for plaintiff to sell such sockets; and that such representations were not made in good faith but were made for the purpose of competing unfairly with plaintiff and diverting plaintiff's business to defendant.

(j) Defendant well knew when it charged Seeger Refrigerator Company and Sears, Roebuck & Company with infringement of the Holloway patent that the allegedly infringing sockets were supplied by plaintiff, and plaintiff therefore believes and alleges that said charges of infringement were intended to harass and injure plaintiff and were not made in good faith but were made for the purpose of diverting the business of said companies to defendant.

(k) Defendant's aforesaid representations and charges of infringement have put plaintiff to great expense and have made it necessary for plaintiff to indemnify its customers against charges of infringement and suits for in-
11 fringement on the part of defendant on account of plaintiff's sale of Exhibit B type sockets.

VI. Non-infringement.

(a) The Exhibit B type sockets presently manufactured by plaintiff and which it has manufactured continuously and exclusively since September 16, 1949, do not

infringe any claim of Letters Patent No. 2,460,636 to Holloway and do not come within the purview of the June 16, 1949 license agreement between the parties.

(b) In view of the prior state of the art and the language of the claims of said Letters Patent to Holloway and of the proceedings in the Patent Office in connection therewith, said Letters Patent are of such limited scope that they do not cover the Exhibit B type socket made by plaintiff; and if said Letters Patent be given a sufficiently broad scope to cover said Exhibit B type socket then said Letters Patent are invalid and void in view of the prior state of the art and in view of the prior patents, publications, uses and knowledge referred to in Paragraph VII of this Complaint.

VII. Invalidity.

Plaintiff further alleges that the aforesaid patent to Holloway, No. 2,460,636, is invalid and void on each of the following grounds, inter alia:

12 (a) That the patentee named in said Letters Patent was not the original, first and sole inventor or discoverer of the alleged invention described and claimed in said Letters Patent or of any material or substantial part thereof, but that, on the contrary, long prior to the alleged invention or discovery by said patentee, and more than one year prior to his application for said Letters Patent, the alleged invention purporting to be patented thereby, and all material and substantial parts thereof, was known and used by others in this country and was patented and described in printed publications in this and in foreign countries, and was in public use and on sale in this country for more than one year prior to the application for said Letters Patent and was patented or caused to be patented by the patentee or his legal representatives or

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assigns in foreign countries upon applications filed more than one year prior to the filing of his application in this country.

(b) The prior art patents referred to, insofar as at present ascertained, are as follows:

Number	Patentee	Date
2,099,405	Langdon	1937
Re.20,585	Kollath	1937
2,277,468	Welch	1942

and other patents or publications which plaintiff prays leave to insert in this Complaint by amendment when ascertained.

13 (c) The names and addresses of persons and companies alleged to have invented or to have had prior knowledge of and used the alleged invention covered by said Letters Patent No. 2,460,636 in the United States, and the places of their use insofar as at present ascertained, are the patentees and assignees of said Letters Patent above listed at the addresses given therein and elsewhere, Westinghouse Electric Corporation, Mansfield Works, Mansfield, Ohio, Packard Division of General Motors Corporation, Warren, Ohio, and other persons and companies at present unknown to plaintiff, but which plaintiff prays leave to insert in this Complaint by amendment when ascertained or when discovered.

(d) The alleged invention claimed in said Letters Patent does not constitute patentable invention, improvement or discovery within the meaning of the patent law in view of the prior state of the art as disclosed in the various patents hereinabove enumerated and various others, and in view of what was common knowledge to those named, and others skilled in the art, at the time of the alleged invention of the same by the said patentee.

VIII. Invalidity.

(a) The description and disclosure of the alleged invention contained in said Letters Patent No. 2,460,636 are not in such full, clear, concise and exact terms as to enable persons skilled in the art or science to which it appertains or to which it is most nearly connected, to make and use the same.

14

(b) The claims of said Letters Patent in suit are vague, ambiguous and indefinite and fail to point out and distinctly claim the parts, improvements, or combinations claimed by the patentee as his invention or discovery.

(c) The claims of said Letters Patent are excessive in number, breadth and scope and their defects have not been cured within a reasonable time by disclaimer.

(d) The claims of said Letters Patent do not claim valid and patentable combinations, but embrace mere aggregations of parts forming no true and proper combination and having no cooperation in a patentable sense.

(e) The said Letters Patent in suit were surreptitiously and unjustly obtained for something which was, in fact, first invented by others who were using reasonable diligence in perfecting the same, to wit, the persons and companies referred to above in paragraph VII (c).

IX. Damages.

(a) Plaintiff has suffered great loss of business and has been subjected to great and undue expense and other irreparable damage and injury as a result of defendant's aforesaid acts of unfair competition, and on account of the charges, representations and threats which defendant has made to the trade based on the alleged infringement of said Letters Patent to Holloway, No. 2,460,636 by plaintiff in manufacturing and selling Exhibit B type sockets.

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(b) Plaintiff is informed and believes that unless defendant is restrained by this Court defendant will continue to compete unfairly with plaintiff and to charge plaintiff, its agents, representatives, customers and dealers with infringement of said Letters Patent to Holloway, and will continue to represent to the trade that said Exhibit B type sockets infringe said Letters Patent to Holloway, all to the great and irreparable injury and damage of plaintiff.

(c) Plaintiff has no adequate remedy at law.

Wherefore plaintiff prays:

(a) For a preliminary injunction pending the determination of this suit restraining defendant, its agents, representatives and attorneys from charging plaintiff or any customer, agent, representative, prospective customer
16 or distributor of plaintiff with infringement of the aforesaid patent to Holloway, No. 2,460,636, on account of the manufacture, sale, use or purchase of plaintiff's Exhibit B type sockets; and from in any manner representing to the trade or to any person, company, or corporation that said sockets infringe said Letters Patent; and from bringing suit against plaintiff, its agents, representatives, distributors or customers on account of the manufacture, use or sale of Exhibit B type sockets.

(b) For a permanent injunction enjoining defendant, its agents, attorneys, employees and representatives from charging plaintiff or any customer, agent, representative, prospective customer or distributor of plaintiff with infringement of the aforesaid patent to Holloway, No. 2,460,636, on account of the manufacture, sale, use or purchase of plaintiff's Exhibit B type sockets, or from representing to the trade or to any person, company or corporation that said sockets infringe said Letters Patent.

(c) That the [plaintiff] have judgment for damages on account of the loss and damage to its business occasioned by the defendant's aforesaid acts of unfair competition and the loss and damage to plaintiff's business arising from the aforesaid charges of infringement, and on ac-
17 count of the undue and unwarranted expenses incurred by plaintiff on account of said threats and charges.

(d) That a declaratory judgment be entered herein adjudging that defendant's Exhibit B type sockets do not infringe any claim of the said Letters Patent to Holloway, No. 2,460,636, and that each and every claim of the said Letters Patent is invalid and void;

(e) That a decree be awarded to plaintiff for the costs and expenses of this suit, including a reasonable attorney's fee for the plaintiff.

(f) That the plaintiff have such further and other relief as to this Court shall seem meet.

UNITED MFG. & SERVICE CO.

By /s/ Ira Milton Jones
Counsel for Plaintiff
110 East Wisconsin Ave.
Milwaukee 2, Wisconsin

Of Counsel:
/s/ Lederer, Livingston, Kahn & Adsit
120 South La Salle Street
Chicago 3, Illinois

/s/ Frank H. Marks
120 South La Salle Street
Chicago 3, Illinois

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18 STATE OF WISCONSIN }
COUNTY OF MILWAUKEE } ss

HALBERT W. HOARD, being first duly sworn on oath, deposes and says that he is the President of the United Mfg. & Service Co., the plaintiff in this action, that he has read, or heard read, the Complaint and that the facts therein stated are true to his own knowledge, except as to those matters therein stated on information and belief, and as to such matters he believes them to be true.

/s/ Halbert W. Hoard

Sworn to and subscribed before me on this 15th day of December, 1949.

/s/ Corinne B. Blair
Notary Public

My commission expires: 1/29/50

(NOTARIAL SEAL)

EXHIBIT A

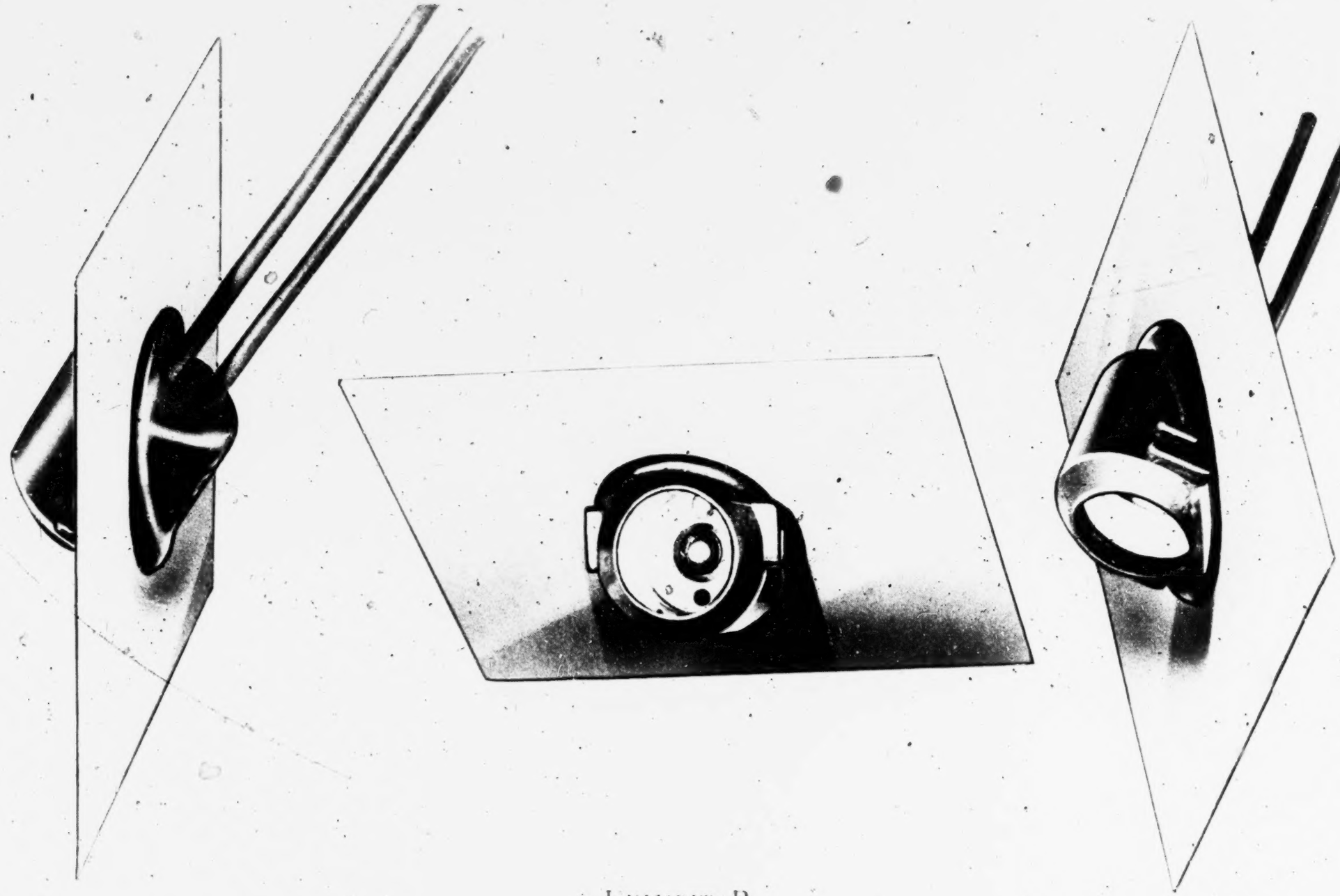

EXHIBIT B

EXHIBIT C

Law Office of
McKnight and Comstock
One North La Salle Street
Chicago 2, Ill.
STate 2-8509

James R. McKnight
Robert C. Comstock

Patents
Trade Marks

Seeger Refrigerator Co.
Evansville, Indiana

Gentlemen:

Referring to our letter to you of April 12, 1949, our client Holwin Corporation granted a patent license to your supplier United Mfg. & Service Co. of Milwaukee, Wisconsin. This license authorizes them to manufacture and sell to your company self-sealing electric light sockets for refrigerator panels made in accordance with patent 2,460,636 issued February 1, 1949 and owned by our client.

Royalties were duly paid under said license covering sockets manufactured up to September 16, 1949. Our client was informed by United that it would pay no royalties for sockets manufactured and shipped to you after that date.

We understand that United considers its sockets manufactured since that date to be outside the scope of our client's patent. We have notified them that in our opinion the sockets manufactured after September 16th clearly infringe our client's patent.

We consider all sockets shipped to you by United since that date to be made in accordance with our client's patent and to be infringements thereof. They cannot be con-

sidered as manufactured within the license granted by our client because United has not paid and has refused to pay royalties thereon.

Since you may not have been aware of this situation, we are writing to advise you of the facts. We trust that upon having this matter called to your attention you will promptly discontinue this infringement. Kindly let us hear from you on this matter at your earliest convenience.

Sincerely yours,

McKnight and Comstock

/s/ Robert C. Comstock

RCC:jh

EXHIBIT D

21 MC KNIGHT AND COMSTOCK
One North La Salle Street
Chicago 2, Illinois

November 25, 1949

Sears, Roebuck & Co.
West Arthington & South Homan
Chicago, Illinois

Gentlemen:

We represent Holwin Corporation of this city, the owner of United States patent 2,460,636 issued February 1, 1949 for self-sealing electric light sockets for refrigerator panels.

Subsequent to the issuance of this patent, sockets in infringement thereof were made by United Mfg. and Serv-

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ice Co. of Milwaukee, Wisconsin for Seeger Refrigerator Co. of Evansville, Indiana. We understand that these sockets were used exclusively in Coldspot refrigerators, all of which were manufactured for and sold to your company.

Our client granted a license to United Mfg. & Service Co. to manufacture and sell sockets under the above named patent. Royalties were duly paid to our client thereunder for all sockets manufactured and shipped to Seeger prior to September 16, 1949.

Our client was notified by United that it would pay no royalties on sockets manufactured since September 16, 1949. We have notified them that all such sockets on which royalties are not paid are infringements of the patent.

On November 14, 1949, we notified Seeger Refrigerator Co. of this fact and have as yet received no reply to our letter.

We understand that all of the refrigerators which are manufactured by Seeger contain the infringing sockets and are made and sold to your company. We are informed that you are now selling or intend to sell and offer for sale in Chicago Coldspot refrigerators containing sockets made by United which infringe our client's patent 2,460,636. If this is not true, you are requested to advise us promptly. Otherwise, we shall be forced to file suit for patent infringement seeking an injunction and profits and damages arising from such infringement after the date of this letter.

Sincerely yours,

McKnight and Comstock

/s/ Robert C. Comstock

RCC:jh

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AMENDMENT TO COMPLAINT

[Filed January 3, 1950]

24 To the Honorable, the Judges of the United States District Court for the Northern District of Illinois, Eastern Division:

Now comes the plaintiff above named, by its attorneys, and pursuant to the provisions of Rule 15(a), Federal Rules of Civil Procedure, amends its complaint heretofore filed in the above entitled action by the addition of the following allegations and prayers thereto:

X. Fraud.

(a) Plaintiff is informed and believes, and therefore alleges, that Charles M. Holloway, the patentee of the aforesaid Letters Patent, well knew at the time he filed his application for the same that he was not the inventor of the subject matter claimed therein and that sockets of the type claimed in said application and Letters Patent had been in public use and on sale in the United States for more than one year prior to the date of filing said application, and that said sockets had been invented by a person or persons other than himself.

25 (b) Plaintiff is further informed and believes, and therefore alleges, that the affidavit of S. R. Loughman, secretary-treasurer of defendant, executed September 27, 1948 and filed in support of the petition to make special the prosecution of the application for said Letters Patent to Holloway, contained false and misleading statements which were willfully and deliberately contrived and intended to deceive the Commissioner of Patents into believing that the defendant was not at that time in production of sockets of the type covered by said application,

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whereas in fact the defendant was then in commercial production of the same. Said false and misleading statements were made for the purpose of obtaining an early issuance of said Letters Patent to Holloway, so as to obtain for the defendant an unlawful monopoly of the sale of such sockets and to interfere with the contemplated sale thereof by the plaintiff, of which defendant had knowledge at the time.

(c) The defendant well knew at the time it entered into the license agreement with plaintiff on June 16, 1949 that said Letters Patent to Holloway were invalid and void as having been fraudently procured and that there was therefore fraud in the inducement to plaintiff to enter into said agreement and a failure and want of consideration on the part of defendant.

(d) As a result of defendant's fraudulent procurement of the aforesaid Holloway patent, but in reliance upon the ostensible validity thereof, plaintiff was compelled to go to great and unnecessary trouble and expense in negotiating the aforesaid license agreement and in redesigning its sockets to the Exhibit B type, making extensive changes in the mold for the manufacture of the same, and promoting the sale thereof.

26 Wherefore plaintiff prays, in addition to the relief sought in the complaint heretofore filed:

(g) That the license agreement between the parties dated June 16, 1949 be declared null and void *ab initio*.

(h) For a judgment for damages in the amount of all royalties paid by plaintiff to defendant under the said license agreement, together with costs and expenses incurred by plaintiff in negotiating and entering into the same, and in designing the Exhibit B type socket, making

extensive changes in the mold for the production of the same, and promoting the sale thereof, all with interest.

(i) For exemplary and punitive damages.

UNITED MFG. & SERVICE CO.

By /s/ Ira Milton Jones
Counsel for Plaintiff
110 East Wisconsin Ave.
Milwaukee 2, Wisconsin

Of Counsel:

/s/ Lederer, Livingston, Kahn & Adsit
120 South La Salle Street
Chicago 3, Illinois

/s/ Frank H. Marks
120 South La Salle Street
Chicago 3, Illinois

27 STATE OF WISCONSIN }
COUNTY OF MILWAUKEE } ss

HALBERT W. HOARD, being first duly sworn on oath, deposes and says that he is the President of the United Mfg. & Service Co., the plaintiff in this action, that he has read, or heard read, the Amendment to Complaint and that the facts therein stated are true to his own knowledge, except as to those matters therein stated on information and belief, and as to such matters he believes them to be true.

/s/ Halbert W. Hoard

Sworn to and subscribed before me on this 30th day of December, 1949.

/s/ Corinne B. Blair
Notary Public

My commission expires: 1/29/50

(NOTARIAL SEAL)

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ANSWER AND COUNTERCLAIM

[Filed February 10, 1950]

28 Comes now Holwin Corporation, defendant herein, and for answer to the complaint states the following:

1. Defendant admits the allegations of paragraphs 1 through 4.

2. Responding to paragraph 5(a), defendant is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in the first three sentences of this paragraph. With regard to the remaining allegations of this paragraph, defendant admits that it did not inform plaintiff that it had any patent application on file or in the course of preparation covering defendant's sockets for the reason that patent applications are by law made secret and defendant was and is under no obligation whatsoever to give plaintiff any information regarding its patent applications. Defendant admits that one of its officers, learning that plaintiff was in the process of copying the internal structure of defendant's socket, mentioned to one of plaintiff's employees the fact that defendant had filed an application for patent on the internal structure of said socket, which was true. Plaintiff apparently then changed the internal structure of its copied socket, but copied the external structure in its entirety.

3. Responding to paragraph 5(b), defendant admits all of the allegations of this paragraph except that defendant denies that its patent is limited to sockets of the type shown in plaintiff's Exhibit A, and states that defendant's
29 patent clearly covers sockets now being manufactured and sold by plaintiff. Defendant is without knowledge or information sufficient to form a belief as to the truth of the

allegation that plaintiff's purpose in entering into the patent license agreement with defendant was to avoid embarrassment to its customer. Defendant alleges that a stronger reason was the fact that plaintiff had very obviously copied defendant's socket and infringed defendant's patent and wanted to avoid having a judgment for profits and damages for patent infringement entered against it.

4. Defendant denies the allegations of paragraph 5(c) and further states that by entering into a license agreement under the patent, plaintiff acknowledged the validity of defendant's patent and is now estopped to contest the validity of said patent.

5. Responding to paragraph 5(d), defendant is without knowledge or information sufficient to form a belief as to the truth of the allegations of the first sentence of this paragraph. Further responding to said first sentence, defendant states that plaintiff's Exhibit B is not a true or accurate photograph or even a photograph in the true sense of the word, but has been so highly altered and retouched as to constitute a fanciful drawing. It does not show the true and actual physical features or construction of the socket. Defendant is informed and believes that said purported photograph was prepared at least in part for the purpose of deceiving this Court as to the construction of plaintiff's infringing sockets. Defendant admits the remaining allegations of this paragraph and further alleges that at the time the parties entered into their patent license agreement, plaintiff eagerly and summarily accepted the terms thereof. It was only thereafter that plaintiff threatened to change its sockets in one small particular and thereafter refused to pay any royalties unless defendant agreed to reduce the royalty to only one

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fourth of that agreed upon by the parties and provided
30 for in the license agreement. Plaintiff further threatened that its actions would encourage others to do likewise and infringe defendant's patent. Defendant refused to be coerced and informed plaintiff that its actions were apparently not intended in good faith and that plaintiff's proposed socket would not in any way avoid infringement of the letter or spirit of defendant's patent. Plaintiff's attorney then secretly approached one of the officers and substantial stockholders of defendant corporation in a futile effort to force defendant to yield to its improper demands.

6. Defendant denies the allegations of paragraph 5(e), except as follows. On October 6, 1949, plaintiff first informed defendant that it would refuse to pay defendant royalties due it under the patent license agreement between the parties for sockets shipped by plaintiff after September 16, 1949. The only basis stated for plaintiff's refusal to pay the royalties to defendant was its statement that the sockets did not come within the terms of defendant's patent. Defendant had previously repeatedly informed plaintiff and again informed plaintiff that its socket came within the terms of defendant's patent. Defendant was informed and believed that plaintiff continued to sell sockets to Seeger Refrigerator Co. for use in refrigerators made by it for and sold to Sears, Roebuck & Company, its parent corporation. In order to inform those companies of the facts, defendant's attorneys sent to them the letters marked plaintiff's Exhibits C and D. One letter only was sent to each of those companies, each of whom was violating and is now violating defendant's patent. Defendant's sockets do not bear a patent marking and the patent statutes require that actual notice of infringement must be given an infringer before profits or

damages can be recovered. Those notices were therefore essential to the protection of defendant's patent rights and were sent in complete good faith on the advice of patent counsel.

31 The notice to Sears, Roebuck & Co. stated that defendant would file suit against that company. This statement was made because defendant was about to file such a suit and defendant's attorney had the complaint completely prepared and ready for filing. The response received from the attorney for Sears stated that "the matter will be carefully investigated and you will be advised." Defendant's attorney accepted this statement in good faith and withheld the filing of the complaint until a reply was received. Instead of a reply, defendant received the summons and complaint in this case. Although more than two months have elapsed, defendant is still waiting to receive a reply from the Sears attorney.

Defendant denies that it ever made any threats to the Crosley Division of the Avco Manufacturing Corporation, Cincinnati, Ohio. In this connection, defendant states that it was informed that plaintiff had sent to said company an offer to manufacture sockets which infringed defendant's patent. Defendant thereupon showed its patent to the employees of said company without comment. The patent attorney for said company, after study of the patent and plaintiff's proposed socket, advised them that there would be infringement of defendant's patent if the proposed socket were purchased from plaintiff. Defendant made no threats of any kind to said company at that time or at any time. Defendant was further informed by the officials of that company that regardless of any patent situation, that company did not intend to purchase any sockets from either the plaintiff or the defendant.

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7. Defendant admits the allegations of paragraphs 5(f) and (g) and states that paragraph 6 of this answer sets forth the true and full facts with relation thereto. Defendant again denies that Exhibit B is a true photograph of the infringing sockets now made and sold by plaintiff. Defendant further states that plaintiff's attorney threat-
32 ened defendant and defendant's attorney with a suit for declaratory judgment not only on November 29th, but also on July 22nd, August 8th, August 12th and October 13th. In each case plaintiff was informed that it was free to bring such a suit at any time.

8. Responding to paragraph 5(h), defendant admits that it is in the business of manufacturing and selling self-sealing electric light sockets for refrigerator panels under its patent 2,460,636 and that it sells them in the same trade channels in which plaintiff sells sockets infringing said patent; and that defendant's sockets are sold in direct competition with plaintiff. Defendant does not know of any "angle socket" other than defendant's patented socket. Defendant denies again that Exhibit B is a true photograph of the infringing sockets now made and sold by plaintiff.

9. Defendant denies the allegations of paragraph 5(i). Defendant further alleges on information and belief that plaintiff has never had more than one customer for its sockets. Defendant further denies that any of plaintiff's business has ever been or ever will be diverted to defendant.

10. Responding to paragraph 5(j), defendant admits that it knew that plaintiff supplied the infringing sockets to Seeger Refrigerator Co. and Sears, Roebuck & Co. Defendant denies that the infringement notices were intended to harrass or injure plaintiff or were not made

in good faith or were for the purpose of diverting the business of said companies to defendant. The notices were necessary to protect defendant's patent rights and were sent for that purpose in good faith and on the advice of patent counsel.

11. Defendant is without knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 5(k). Defendant further states that any expense which plaintiff may have incurred has been
33 caused solely by its actions in deliberately copying defendant's socket and infringing defendant's patent and refusing to pay defendant the royalties which it owes defendant.

12. Defendant denies the allegations of paragraph 6(a). Defendant again denies that Exhibit B is a true photograph of the infringing sockets now made and sold by plaintiff.

13. Defendant denies the allegations of paragraph 6(b). Defendant further states that plaintiff is estopped to attack the validity or scope of defendant's patent for the reason that plaintiff is a licensee under said patent. This paragraph is therefore improper and should be stricken.

14. Defendant denies the allegations of each and every portion of paragraphs 7 and 8 and further states that plaintiff is estopped to attack or question the validity of defendant's patent for the reason that plaintiff is a licensee under said patent. These paragraphs are therefore improper and should be stricken.

15. Defendant denies the allegations of paragraph 9(a) and further alleges that any expense which may have been incurred by plaintiff has been due solely to its

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deliberate copying of defendant's sockets and infringement of defendant's patent and refusal to pay royalties due to defendant.

16. Defendant denies the allegations of paragraph 9(b). Defendant further states that the sockets now made and sold by plaintiff are infringements of defendant's patent and defendant will so notify any persons who make, use or sell them. Defendant will send no further notices to plaintiff's only customer, Seeger Refrigerator Co. and its parent corporation Sears, Roebuck & Co., because both of said companies have already been notified of said infringement and have been persuaded by plaintiff to continue the infringement.

17. Defendant denies the allegations of paragraph 9(c) and further states that the paragraph is meaningless.

34 18. Defendant denies the allegations of each and every portion of paragraph 10. Defendant further alleges that any statements relating to defendant's petition to the Commissioner of Patents for special action on its application are of no concern to plaintiff now or at any time. Such proceedings cannot properly be attacked by plaintiff or collaterally attacked by plaintiff and are of no relevance to the issues of this case. The correctness of the Commissioner's decision in granting said petition is not subject to challenge by this plaintiff or in this action or in this Court and has no bearing whatsoever on the validity or infringement of defendant's patent. Defendant further alleges that plaintiff is estopped to attack or question the validity of defendant's patent for the reason that plaintiff is a licensee under said patent. Defendant further states that the contents of this paragraph are irrelevant, immaterial, impertinent and scandalous and should be stricken.

19. Further responding to paragraph 10 of the complaint, defendant alleges that this paragraph fails to allege a cause of action or to state a claim upon which relief can be granted and that no basis is shown therein or elsewhere in the complaint for the relief requested by plaintiff.

20. Further responding to the complaint, defendant alleges that the complaint fails to allege a cause of action or to state a claim upon which relief can be granted, or to state any basis for the relief requested by plaintiff.

35

COUNTERCLAIM

As a counterclaim against plaintiff, defendant alleges the following:

1. On June 16, 1949, plaintiff and defendant entered into a patent license agreement whereby defendant granted to plaintiff a license under United States Letters Patent Number 2,460,636 issued by the United States Patent Office for Self-Sealing Electric Light Sockets for Refrigerator Panels to Charles M. Holloway and assigned to defendant, under which license plaintiff was given the right to make, use and sell sockets under said patent to Seeger Refrigerator Co. of Evansville, Indiana and plaintiff agreed to pay to defendant a royalty of 1c for each socket made and sold under said license on or about April 12, 1949, which was the date on which defendant notified plaintiff of its infringement of defendant's patent.

2. Plaintiff paid to defendant the sum of $500 as an initial payment in consideration for the granting to plaintiff of said patent license agreement.

3. On or about August 9, 1949, plaintiff paid to defendant the sum of $329.50 purportedly to cover the

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royalties due to defendant under said patent license agreement for all sockets made and sold by plaintiff from April 12, 1949 to June 30, 1949, which plaintiff represented to total 32,950 sockets.

4. On or about August 23, 1949, after defendant's demand, plaintiff paid to defendant the additional sum of $207 covering an additional 20,700 sockets which had been made and sold by plaintiff between April 12, 1949 and June 30, 1949 on which royalties had not been paid.

5. On or about October 6, 1949 plaintiff paid to defendant the sum of $467.00 for 46,700 sockets made and
36 sold by plaintiff under said patent license agreement during the period from June 30, 1949 to September 16, 1949.

6. Although royalties were due at that time for all sockets made and sold by plaintiff under said patent license agreement up to September 30, 1949, plaintiff refused to pay defendant the royalties due it for the sockets made and sold by plaintiff during the period from September 16, 1949 to September 30, 1949.

7. Plaintiff has paid defendant no royalties whatsoever for sockets made and sold by it under said patent license agreement since September 16, 1949. Defendant is informed and believes that plaintiff has made and sold sockets constructed in accordance with said patent and coming within the terms of said patent license agreement continuously since September 16, 1949 and that plaintiff will continue to make and sell them in the future without payment of royalties to defendant unless the payment of said royalties to defendant is ordered by this Court.

8. The patent license agreement entered into by plaintiff and defendant on June 16, 1949 is still in full force

and effect and always has been and has never been revoked, cancelled or voided in any way. Defendant has fully performed all of its obligations under said patent license agreement and is prepared to do so for the future.

9. In addition to refusing to pay defendant the royalties due it under said patent license agreement, defendant is informed and believes that plaintiff and its officers, agents and representatives have repeatedly informed and are now informing defendant's customers and prospective customers that the sockets made and sold by plaintiff do not infringe or come within the terms of defendant's patent and that said customers should buy cheaper sockets
37 from plaintiff instead of from defendant. Defendant is informed and believes that plaintiff's actions and statements are calculated to and do encourage others to infringe defendant's patent and to violate defendant's patent rights and that said statements are deliberately made by plaintiff with the intent to destroy defendant's patent and to appropriate the business of defendant's customers and prospective customers.

10. Defendant is informed and believes that plaintiff and its officers, agents and representatives have informed many persons in the trade that defendant's patent is invalid and void and of no value, that anyone is free to manufacture or sell sockets similar to plaintiff's without regard t defendant's patent or patent rights and that many manufacturers other than plaintiff will soon manufacture sockets identical with plaintiff's without regard to or respect for defendant's patent. Defendant is informed and believes that plaintiff's actions and statements are deliberately made with the intent to destroy defendant's patent and patent rights.

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11. The agreement which is attached hereto and made a part hereof, marked Defendant's Exhibit A, is a true copy of the patent license agreement entered into between the parties hereto on June 16, 1949.

Wherefore the defendant requests:

1. That the complaint herein be dismissed and this counterclaim sustained.

2. That a decree be entered holding that the sockets manufactured by plaintiff after September 16, 1949 and now manufactured by plaintiff are constructed in accordance with defendant's patent 2,460,636 and come within the terms of the license agreement entered into June 16, 1949 between the parties.

38 3. That plaintiff be ordered to pay over to defendant with interest at legal rates from the date due, royalties under the patent license agreement of June 16, 1949 between the parties at the contract rate of 1c per socket for all sockets manufactured and sold by plaintiff to Seeger Refrigerator Co. of Evansville, Indiana from September 16, 1949 to the date of this Court's decree and that a judgment in that amount be entered against plaintiff and that plaintiff be ordered to pay such royalties in the future in accordance with the terms of said patent license agreement.

4. That a permanent injunction be issued, enjoining and restraining plaintiff, its officers, directors, agents, employees, attorneys and those in active concert or participation with them from representing or stating to anyone that defendant's patent is invalid or void or of no value or that plaintiff's sockets do not come within the terms of defendant's patent or that sockets may be made similar to plaintiff's without regard to defendant's patent.

5. That this case be referred to a Master in Chancery to be appointed by this Court to account for and determine the damages suffered by defendant by reason of plaintiff's non-payment of royalties and by reason of plaintiff's unfair and untrue statements to the trade and to defendant's customers and prospective customers with regard to defendant's patent and patent rights and that a judgment in that amount be entered against plaintiff.

6. That defendant be awarded full costs and attorney's fees and expenses.

HOLWIN CORPORATION,

By /s/ Charles M. Holloway,
President.

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/s/ James R. McKnight

/s/ Robert C. Comstock

One North LaSalle Street
Chicago 2, Illinois

Attorneys for Defendant.

STATE OF ILLINOIS)
COUNTY OF COOK) ss

Charles M. Holloway, being first duly sworn, deposes and says that he is President of Holwin Corporation, defendant in the above entitled action; that he has read and signed the foregoing answer and counterclaim on behalf of said corporation and that he is authorized to sign the same on behalf of said corporation; that the facts stated therein are true, except as to those matters

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stated therein to be alleged on information and belief, and as to those matters, he believes them to be true.

/s/ Charles M. Holloway

Subscribed and Sworn to before me
this 9th day of February, 1950.

/s/ Joyce Meyer
Notary Public

DEFENDANT'S EXHIBIT A

40 LICENSE AGREEMENT

This agreement made and entered into by and between Holwin Corporation, an Illinois corporation of 1049 North Paulina, Chicago, Illinois, hereinafter referred to as HOLWIN and United Mfg. and Service Co., a Wisconsin corporation of 405 South Sixth Street, Milwaukee, Wisconsin, hereinafter called UNITED,

Witnesseth That:

Whereas HOLWIN is the sole and lawful owner of United States Letters Patent 2,460,636 issued February 1, 1949 for patent on Self-Sealing Electric Light Socket for Refrigerator Panels, and

Whereas UNITED has manufactured and sold to Seeger Refrigerator Co. of Evansville, Indiana certain self-sealing electric light sockets for refrigerator panels which HOLWIN, under date of April 12, 1949, claimed constituted an infringement of said patent, and

Whereas the parties are desirous of settling the controversy between them with regard to the manufacture of said self-sealing electric light sockets for refrigerator panels,

Now, therefore, for and in consideration of the promises and covenants hereinafter recited to be faithfully performed, it is hereby understood and agreed by and between the parties hereto as follows:

1. HOLWIN hereby grants to UNITED a non-exclusive, non-transferable license to make and sell to Seeger Refrigerator Co. of Evansville, Indiana, self sealing electric light sockets for refrigerator panels constructed in accordance with the claims of United States Letters Patent 2,460,636 issued February 1, 1949, for the full term of said patent and any extensions and renewals thereof, it being understood that UNITED will not make or sell self-sealing electric light sockets for refrigerator panels made in accordance with the claims of said patent
41 to any corporation, firm or individual other than Seeger Refrigerator Co. of Evansville, Indiana.

2. UNITED hereby agrees to pay to HOLWIN the sum of Five Hundred Dollars ($500.00) immediately upon the execution of this agreement, said sum to be an outright payment not deductible from royalties and UNITED further agrees to pay to HOLWIN a royalty of one cent (1c) for each self-sealing electric light socket for refrigerator panels made in accordance with said patent by UNITED and sold to Seeger Refrigerator Co., including all sockets shipped on and after April 12, 1949.

3. UNITED hereby agrees to pay the royalties provided for in paragraph 2 of this agreement to HOLWIN on or before the 15th day of January, April, July and October, for royalties earned during the three calendar months preceding each date of payment.

4. UNITED hereby agrees to keep books on the manufacture and sale of all electric light sockets for re-

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frigerator panels made in accordance with said patent and agrees that all said books shall be available at all times for inspection by HOLWIN or its attorneys, accountants or representatives.

5. HOLWIN reserves the right to make, use and sell electric light sockets for refrigerator panels made in accordance with said patent, including the right to make and sell the same to Seeger Refrigerator Co. and HOLWIN reserves the right to license others to make, use and/or sell electric light sockets for refrigerator panels made in accordance with said patent.

6. This agreement shall remain in full force and effect for the life of patent 2,460,636 and any extensions or renewals thereof.

7. UNITED shall not have the right to sublicense anyone to make, use or sell electric light sockets for refrigerator panels in accordance with said patent.

42 8. This license agreement may not be assigned by UNITED without first receiving the consent in writing of HOLWIN to said assignment.

UNITED MFG. & SERVICE CO.

By /s/ Halbert W. Hoard
President

HOLWIN CORPORATION

By /s/ Charles M. Holloway
President

STATE OF WISCONSIN)
COUNTY OF MILWAUKEE) SS

On this 15th day of July, 1949, personally appeared before me Halbert W. Hoard, who executed the foregoing agreement and who testified that as President of United-Mfg. & Service Co., he had the authority to execute the same on behalf of said corporation.

(SEAL) /s/ Corinne B. Blair
Notary Public

My commission expires January 29, 1950

STATE OF ILLINOIS)
COUNTY OF COOK) SS

On this 20th day of July, 1949, personally appeared before me Charles M. Holloway, who executed the foregoing agreement and who testified that as President of Holwin Corporation he had the authority to execute the same on behalf of said corporation.

/s/ Joyce Meyer

(SEAL) Notary Public

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OPINION OF UNITED STATES COURT OF APPEALS FOR THE SEVENTH CIRCUIT

[April 3, 1951]

James R. McKnight, Robert C. Comstock, Chicago, Ill., for appellant.

Frank H. Marks, Chicago, Ill., Ira Milton Jones, Milwaukee, Wis. (Lederer, Livingston, Kahn & Adsit, Chicago, Ill., of counsel), for appellee.

190 Before Major, Chief Judge, Duffy and Swaim, Circuit Judges.

Swaim, Circuit Judge.

The plaintiff filed action for a declaratory judgment which would adjudge that: (1) certain electric light sockets for refrigerators which plaintiff was manufacturing and selling did not infringe any claim of the letters patent owned by defendant; (2) that each of the claims of defendant's letters patent was invalid and void; and (3) that plaintiff have a judgment for damages, attorneys' fees and costs because of the unfair competition of defendant in charging to plaintiff's customers that plaintiff's socket infringed defendant's patent. Later plaintiff amended its complaint to include a charge of fraud in procuring the patent and in inducing plaintiff to enter into the license agreement. The amendment to the complaint prayed that the license agreement "be declared void *ab initio*" and for damages in the amount of all royalties paid by plaintiff and all expenses it had incurred in securing the license agreement and in designing and producing a socket outside the patent.

The defendant filed its answer to the complaint and also filed a counterclaim asking: (1) a decree holding that

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all sockets made by plaintiff after September 16, 1949, were made in accordance with the defendant's patent and are within the terms of the license agreement; (2) that plaintiff be ordered to pay to defendant, pursuant to the terms of the license agreement, royalties on all sockets manufactured and sold by plaintiff after September 16, 1949; (3) an injunction restraining plaintiff from representing to any one that defendant's patent is void or that plaintiff's sockets do not come within the terms of the defendant's patent; and (4) for a judgment for the damages suffered by defendant by reason of plaintiff's failure to pay royalties and by reason of plaintiff's false representations as to defendant's patent.

The counterclaim alleges the execution of the license agreement on June 16, 1949; that, pursuant to the license agreement, the plaintiff paid defendant $500.00 and royalty payments of 1c per socket for all sockets made and sold by plaintiff from April 12, 1949, to September 16, 1949; that plaintiff has refused to pay royalties on any sockets made and sold by it since September 16, 1949, although, since that date, it has made and sold, and will continue to make and sell, "sockets constructed in accordance with said patent and coming within the terms of said patent license agreement"; that said patent license agreement "is still in full force and effect and always has been and has never been revoked, cancelled or voided in any way." The counterclaim further alleged that plaintiff through its officers, agents and representatives has represented to defendant's customers that the sockets made and sold by plaintiff do not infringe or come within the terms of defendant's patent; that such statements by plaintiff encourage others to infringe defendant's patent; and that "said statements are deliberately made by plaintiff with the intent to destroy defendant's patent and to appropriate the business of defendant's customers."

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The trial court, on the motion of plaintiff, dismissed this counterclaim as failing to state a claim upon which relief could be granted, assigning as the reason therefor that the defendant impliedly repudiated the license and consequently cannot sue for royalties on the basis of the license agreement. The trial court based such "repudiation" of the license agreement on two letters the defendant had written, one to Sears, Roebuck & Co., Chicago, Illinois, and the other to Seeger Refrigerator Co., of Evansville, Indiana, the wholly owned subsidiary of Sears. Copies of these two letters were made a part of and attached as exhibits to plaintiff's complaint.

The license agreement here in question recited that the defendant was the sole and lawful owner of the patent in question on electric light sockets for refrigerator panels; that the plaintiff had manufactured and sold to Seeger Refrigerator Co. certain electric light sockets for refrigerator panels, which the defendant claimed constituted an infringement of said patent and that "whereas the parties are desirous of settling the controversy between them" the parties agreed that the defendant thereby granted to the plaintiff a non-exclusive, non-transferable license to make and sell to Seeger Refrigerator Co. electric light sockets constructed in accordance with the claims of the defendant's patent, and that the plaintiff would not make or sell electric light sockets made in accordance with the claims of the patent to any corporation, firm or individual other than Seeger Refrigerator Company. In said agreement the defendant reserved the right to make and sell such electric light sockets to Seeger Refrigerator Company and the right to license others to make, use and sell such electric light sockets for refrigerator panels.

In the license agreement the plaintiff expressly admitted that the defendant was the sole and lawful owner of the patent in question. If this license agreement was valid and was still in effect, the plaintiff could not deny the validity of the defendant's patent. However, the plaintiff contends that the license agreement was revoked and canceled by the conduct of the parties: by the repudiation of the agreement on the part of the defendant by writing the two letters charging infringement of the patent, and on the part of the plaintiff by filing this action, thereby accepting or agreeing to such repudiation.

Both parties admit that if the license agreement is still in effect the plaintiff is estopped to deny the validity of the patent. Both also agree that it is possible for the parties to revoke a license agreement without any formal contract or agreement for such revocation, and that such a revocation may be implied from the conduct of the parties. We are therefore confronted with a question of whether the conduct of the parties here was such that it constituted an implied revocation of the license agreement.

The letter written by defendant's attorneys to Seeger Refrigerator Co. explained that plaintiff had been granted a license by the defendant to make and sell to Seeger sockets made in accordance with defendant's patent. The letter stated that plaintiff had paid royalties, pursuant to the license, covering all sockets manufactured prior to September 16, 1949; that plaintiff had informed defendant it would pay no further royalties after that date because the sockets it was then manufacturing were outside the scope of defendant's patent; that in the opinion of defendant's attorneys all sockets made and shipped by plaintiff after September 16, 1949 were made in accord-

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ance with defendant's patent and were "infringements" thereof; that "they cannot be considered as manufactured within the license granted by our client because United has not paid, and has refused to pay, royalties thereon"; and that the attorneys expected that Seeger would "promptly discontinue this infringement." The letter to Sears, Roebuck & Co. contained similar statements and threatened a suit "for patent infringement seeking an injunction and profits and damages arising from such infringement after the date of this letter," if Sears continued to sell refrigerators containing such sockets. The trial court held that, "By sending notices of infringement to Seeger and Sears, defendant impliedly repudiated the license and consequently cannot sue for royalties on the basis of the license agreement." However, it is clear that the unilateral action of one party to a patent license agreement cannot revoke the agreement. Hartell v. Tilgham, 99 U.S. 547, 556, 25 L.Ed. 357.

It is also clear that while the license agreement is still in effect the owner of the patent cannot sue for infringement. He is limited to the enforcement of his rights and remedies under the license agreement. Harshberger v. Tarrson et al., 7 Cir., 184 F.2d 628, 629. See also Mitchell v. Hawley, 16 Wall. 544, 21 L.Ed. 322.

Even in the oral argument before this court counsel for the defendant seemed to think that a patent licensor could sue customers of the licensee for infringement where the licensee had not paid royalties pursuant to the license agreement. We think this is not a correct legal conclusion, but we do not think that we can consider the expression of such an erroneous legal conclusion an election to repudiate the license agreement when the defendant seems to have thought all along that it was electing

to stand on the license agreement and was only attempting to enforce its rights under the terms of the agreement. Our courts generally take a strict view on attempted revocations or forfeitures of license agreements. The courts dislike forfeitures. See 2 Walker on Patents (Deller's Edition, 1937) § 390.

This court has held that the licensor cannot repudiate a license where the licensee has made machines which it did not consider to be under the license, and for that reason has refused to pay royalties. Carr v. Jaeger Machine Co., 7 Cir., 69 F.2d 434, 435. In Chadeloid Chemical Co. v. Johnson, 7 Cir., 203 F. 993, the license expressly provided that it could be terminated at the patentee's election in case of violation of any of the covenants of the agreement. However, the court refused to enjoin the licensee from further use of the patents upon his violation of the covenant to pay royalties. The court said that the violation of the covenants in the license was at most a matter of contract violation and in no way a trespass upon the reserved rights of the patentee; that such breaches were not made self-operative by the contract. In Comptograph Co. v. Burroughs Adding Mach. Co., 7 Cir., 183 F. 321, where a licensee filed in this court a brief in aid of a third party who was defending in an infringement suit brought by the licensor under the same patent, this court held that such action by the licensee was not such a repudiation as the patentee could accept, and thereby terminate the license.

We are of the opinion that the two letters to Seeger and to Sears cannot reasonably be regarded as an attempted repudiation of the license agreement but can only be considered as an attempt by defendant to collect the royalties due under the agreement. Since those two letters by the

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defendant cannot be considered as a repudiation of the license agreement by the defendant, there could be no acceptance of such a repudiation by the plaintiff by filing this action.

Plaintiff also questions the counterclaim on the theory that it is based on allegations of facts which are inconsistent with the allegations of fact in defendant's answer. The plaintiff finds the allegations of fact inconsistent only by assuming that in the answer the defendants pleaded facts showing the termination of the license agreement. Since we have held above that this assumption by plaintiff was unwarranted, there is no inconsistency in the facts pleaded in the answer and the counterclaim.

The order of the District Court dismissing the counterclaim is reversed and the case remanded for further proceedings not inconsistent with this opinion.

REPLY TO COUNTERCLAIM

[Filed April 9, 1951]

182 Now comes the plaintiff above named, by its attorneys, and for reply to the counterclaim heretofore filed by defendant in the above identified action alleges as follows:

1. Plaintiff admits the allegations of paragraphs 1, 2, 3, 4 and 5 of the counterclaim.

2. Plaintiff admits the allegations of paragraph 6 of the counterclaim, except that plaintiff denies that any royalties were due to the defendant for sockets made and sold by plaintiff during the period from September 16, 1949 to September 30, 1949 and thereafter.

183 3. Answering the allegations of paragraph 7 of the counterclaim, plaintiff admits that it has paid no royalties for sockets made and sold by it since September 16, 1949, and alleges the fact to be that since that date plaintiff has not made any sockets which come within the scope of said license agreement. Wherefore, plaintiff denies each and every allegation contained in the second sentence of paragraph 7 of the counterclaim.

4. Answering the allegations of paragraph 8 of the counterclaim, plaintiff denies that the patent license agreement entered into between the parties on June 16, 1949 is in full force and effect and alleges the fact to be that said agreement was void ab initio. Plaintiff further denies that defendant has fully performed all of its obligations under said patent license agreement.

5. Plaintiff denies each and every allegation of paragraph 9 of the counterclaim.

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6. Plaintiff denies each and every allegation of paragraph 10 of the counterclaim, except that plaintiff admits that it has informed its customers and prospective customers in the trade that its socket similar to plaintiff's Exhibit B socket is not covered by defendant's patent.

7. Plaintiff admits the allegation of paragraph 11 of the counterclaim.

184 8. As a further and affirmative defense to the counterclaim, plaintiff alleges that the patent license agreement of June 16, 1949 was void ab initio as having been procured through fraud, as more particularly set forth in the amendment to the complaint heretofore filed by the plaintiff.

Wherefore, Plaintiff prays:

(a) That defendant's counterclaim be dismissed; and

(b) That plaintiff have judgment in accordance with the prayers of its complaint.

UNITED MFG. & SERVICE CO.

By /s/ Ira Milton Jones

110 E. Wisconsin Avenue
Milwaukee 2, Wisconsin
Counsel for Plaintiff

Of Counsel:

/s/ Lederer, Livingston, Kahn & Adsit
120 South La Salle Street
Chicago 3, Illinois

/s/ Frank H. Marks
120 South La Salle Street
Chicago 3, Illinois

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DOCKET ENTRY

[November 28, 1951]

200 On deft's motion the order of July 11, 1951 requiring deft. to answer pltf's. interrogatories is vacated and set aside and further ordered that deft. need not answer the interrogatories filed by pltf.

MEMORANDUM OPINION

[October 30, 1952]

This is a motion by plaintiff for request for admissions in a declaratory judgment action in which the plaintiff is a licensee under the defendant's patent. Defendant has filed objections. Plaintiff then filed motion to compel answers to questions asked upon adverse examination.

In April 1951 the Court of Appeals for the Seventh Circuit held that the patent license agreement between the parties is still in full force and effect and that plaintiff is estopped to contest the validity of defendant's patent.

Prior to the decision of the Court of Appeals plaintiff had filed a set of interrogatories relating to the validity of defendant's patent. This Court held that defendant need not answer plaintiff's interrogatories as they constituted an attack upon the validity of the defendant's patent and therefore were improper in view of the decision of the Court of Appeals holding that plaintiff cannot attack the validity of defendant's patent.

Despite the rulings of both the Court of Appeals and the District Court, plaintiff proceeded to ask defendant's officers exactly the same interrogatories which were pre-

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viously denied in written form, to which defendant objected.

Plaintiff has now filed a request for admissions which consists of substantially the same questions as the previously written and oral interrogatories. However, they are now in the form of statements. To such request defendant has filed objections on the ground that it constitutes an attack upon the validity of defendant's patent and is substantially identical with the interrogatories previously denied by this Court.

The theory of the plaintiff's case is that there is an existing license agreement between the parties and plaintiff asks this Court to rescind that agreement on the ground that it was procured by fraud. However, plaintiff overlooks the well-established rule of law that alleged fraud in the procurement of a patent cannot be raised as a defense in an action for patent infringement. Only the United States can bring a suit charging that a patent was obtained by fraud. *United States v. Bell Telephone Company*, 128 U.S. 315.

Plaintiff is proceeding in violation of the opinion and mandate of the Court of Appeals holding plaintiff to be a licensee under defendant's patent and thus estopped to contest its validity.

Defendant contends that the provisions of Rule 37 of the Federal Rules of Civil Procedure should be applied as the plaintiff's motion to compel answers to the questions was made without substantial justification. Rule 37 provides:

> "If the motion is denied and if the court finds that the motion was made without substantial justification, the court shall require the examining party or

the attorney advising the motion or both of them to pay to the refusing party or witness the amount of the reasonable expenses incurred in opposing the motion, including reasonable attorney's fees."

This is a case in which plaintiff asked on discovery depositions oral interrogatories which this Court had previously denied as written interrogatories. In furtherance of its attempt to attack the validity of defendant's patent, plaintiff has now filed a request for admissions which consists of questions substantially identical with interrogatories previously denied. Plaintiff in its license agreement admitted that defendant was sole and lawful owner of patent. The Court of Appeals has held the license agreement to be in full force and effect and has held that plaintiff is estopped to contest validity of defendant's patent. Plaintiff's request for admissions is in violation and disregard of the rulings of the Court of Appeals. Defendant's objections thereto sustained. Under provisions of Rule 37, defendant to be awarded expenses and attorney's fees as plaintiff's motion was made without substantial justification.

Defendant's objections to request for admissions sustained.

Plaintiff's motion to compel answers denied.

Defendant should be awarded expenses and attorney's fees.

October 30, 1952. Philip L. Sullivan, Judge.

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TRANSCRIPT OF TRIAL PROCEEDINGS

1 Before the Honorable Win G. Knoch, one of the Judges of said Court, in his Court Room in the United States Court House, Chicago, Illinois, on Tuesday, November 22, 1955, commencing at ten-thirty o'clock a.m.

* * *

2 Mr. Jones: I would like at this time to move to have the title of the case changed to designate the Plaintiff, United Manufacturing & Service Company, as Unilec-
3 tric, Incorporated, to conform the title of this action and all proceedings herein to the change in the Plaintiff's corporate name from United Manufacturing & Service Company to Unilectric, Incorporated.

This change of name occurred about May, 1954, after this action was filed, and the status and the situation is in no wise changed, except merely the change of corporate name.

* * *

The Court: All right. The motion will be granted.

* * *

4 Mr. McKnight: Pardon me. I think it will save a lot of time if I state now that we will rely upon Claim 3, your Honor, so as to shorten the issues involved.

* * *

7 Mr. Jones: I would like to offer the depositions of Leslie C. Wolcott, Robert C. Woofter, John W. Smith, Joseph Hubbard, Albert Rudkin, Winters Snow Johnstone, Donald W. Snethkamp, Darrel Sheesley, Joseph H. Hopkins, Frank A. Smith, Thurlow L. Boyer, Vincent B. Cetrone, and Robert S. Cook.

* * *

Mr. McKnight: I object to these depositions on the ground that they are being offered as an attempt, either

direct or indirect, to attack the validity of the Defendant's Patent in suit, and therefore the depositions are inadmissible as a direct violation of the ruling of the Circuit Court of Appeals in this case that because the Plaintiff and the Defendant are Licensee and Licensor, the validity of the Patent may not be attacked.

8 Mr. Jones: As I said, if the Court please, they are being offered primarily, and of course I am limited to that, so that this Court may know the prior art and therefore what interpretation must be given to Claim 3.

* * *

9 Mr. Jones: At this time, concurrently with the depositions, I would also like to offer the Exhibits that were marked and identified by the witnesses during the taking of the depositions. I presume that the same objection will lie.

Mr. McKnight: Yes; the same objection.

The Court: The Exhibits fall in the same category.

* * *

Direct Examination of E. EUGENE KOHLS

10 By Mr. Jones:

11 Q. Will you give your name, age, residence and occupation?

A. E. Eugene Kohls, fifty-three, 9712 North Lake Drive, Milwaukee, Wisconsin. Occupation, Patent Attorney.

Q. In the course of your work do you prepare and prosecute Patent Applications before the Patent Office?

A. I do.

Q. How long a period of time have you been so doing?

A. Since 1928, I believe it is.

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Q. You have been associated with my office, have you not, since 1921?

A. That is right.

* * *

12 Q. Now, will you please refer to the Chart, which is Chart No. 3.

A. Yes.

* * *

Q. Will you tell the Court briefly just how that chart was made and under whose supervision, whether it was made under your supervision?

A. Yes. The Chart, as well as the other Charts that
13 we have here, were all made under my supervision.

They were made by one of our draftsmen, with whom I worked during the making of the Charts, and we were extremely careful to make the original drawings which were used in the production of these Charts as nearly as possible slavish copies of the exact units that are portrayed therein.

The original drawings are prepared in the same fashion that any Patent drawing is, and then those drawings, along with the printed version of whatever writing occurs on the Chart, are applied to a back-up or a dummy, and then that in turn is photographed and as a result we have finally the completed printed chart.

Q. Will you please examine this socket, which is Plaintiff's Exhibit B-1, which has been stipulated by Mr. McKnight as being the contemporary socket produced by the Plaintiff.

A. Yes.

Q. Will you state what efforts were made in the preparation of the Chart in order to have the illustration in

the right-hand panel be a representation of that socket? I am referring to Chart No. 2, Mr. Kohls.

14 A. Exhibit B-1, which you have handed me, is the article which is illustrated in the right-hand panel of Chart No. 2.

In preparation for the making of this Chart, for the making of these drawings, I had the darftsman apply white ink, either white ink or white paint, down on the bottom of the groove which is defined by the two directly adjacent and facing flanges which encircle the socket on an angle, so that the groove would be better seen and would be more accurately portrayed in the making of the drawing.

Mr. McKnight: May I ask at this time if this witness is testifying to that as an expert witness?

* * *

15 Mr. Jones: I am calling him as an expert.

* * *

16 By Mr. Jones:

Q. What have you to say, Mr. Kohls, as to whether the right-hand panel is a true and accurate illustration of the socket, Plaintiff's Exhibit B-1?

A. It is a true and accurate representation of the socket, Plaintiff's Exhibit B-1, as true and as accurate as it could possibly be made.

Q. Now, you made some comment about having the groove in the socket, Exhibit B-1, inked in white. * * * Why was that done?

A. I should have continued that. I did say that it was done to make it stand out so it would be more visible and could be better seen.

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It was done for the purpose of taking a photograph that was used in the preparation of these Charts, so it would show up better, because the bottom of the groove being down rather deep would not have shown too well in the taking of the photograph that we took in making up these Charts.

Again, in an effort to have it just as slavishly correct as possible.

Q. Now, referring to the left-hand panel, if you will, of Chart No. 2, Exhibit KK— * * * will you tell us
17 what is illustrated in the left-hand panel?

A. In the left-hand panel of the Chart, Exhibit KK, there is a reproduction of Figures 1, 2 and 3 of the Holloway Patent * * * drawing, No. 2,460,636.

Q. Now, in the socket which is illustrated in the right-hand panel of Chart No. 2, how many flanges do you find?

A. Two.

Q. What have you to say as to whether or not either of those flanges is interrupted?

A. Neither one is interrupted.

Q. In other words, there are two spaced-apart continuous flanges?

A. That is correct.

Q. In your study of the File Wrapper of the Holloway Patent did you find therein as originally presented to the Patent Office a Claim readable on the socket, Plaintiff's Exhibit B-1, and the illustration in the right-hand panel of Chart No. 2, Exhibit KK?

A. Yes. That was original Claim 4 of the Application
18 for the Holloway Patent.

Q. Will you read that original Claim 4 as it applies to the socket B-1 and the illustration on the Chart KK, the right-hand panel?

A. It reads:

"An electric light socket for refrigerator panels comprising an outer housing having a hollow interior with an opening adapted to receive an electric light bulb * * * "

In the right-hand panel of the Chart, Exhibit KK, this outer housing is the portion which is colored yellow, and it is generally the body of the entire socket.

The opening referred to in the Claim or mentioned in the Claim is visible in Fig. 1 of the illustration on the Chart.

Proceeding with the recitation of the Claim, or the reading of the Claim, it continues:

" * * * means for connecting said socket to a suitable source of electrical supply * * * "

These means, of course, are the conductors colored green in the right-hand panel of the Chart, Exhibit KK.

Again going forward with a reading of the Claim:

19 " * * * a plurality of oppositely disposed flanges spaced slightly from each other on the outer surface of said rubber housing * * * "

This plurality of oppositely disposed flanges in the illustration in the right-hand panel of Exhibit KK is illustrated in the one case by the color blue, and in the case of the other of the two flanges—and of course, I am interpreting "plurality" to mean or to include two as well as more than two—the other flange is not colored and is left white, but it is clearly visible and clearly shown in Fig. 2 and in Fig. 3.

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In Fig. 3 it is the area which surrounds the portion which is colored yellow, and in Fig. 2 it is that part of the drawing or view which lies directly adjacent to and to the right of the panel or section of sheet metal shown in cross-section into which the socket has been shown assembled.

Continuing with the reading of the Claim:

> " * * *said socket adapted to be installed in an opening in a refrigerator panel so that said flanges grip the edges of the opening and hold the edges
20 in the space between said oppositely disposed flanges, so that said socket may not be accidently turned or removed."

Of course, that functional statement with which the claim concludes finds its response in the disclosure in the right-hand panel of Exhibit KK, the chart, Exhibit KK.

The two flanges there shown do grip the edge of the opening, and I presume effect a relatively good seal with the metal or the panel in which it is secured.

Q. Now, what happened to Claim 4 in the course of the prosecution of the application that resulted in the patent here in litigation?

A. Claim 4 was cancelled. It was originally rejected by the Examiner along with the original Claims 1, 2 and 3, in the Examiner's first action upon the application. That first action was dated October 29th, 1948, and in the File Wrapper is Paper No. 6.

The Examiner's comments concluded with the summary statement, "No Claims are allowed", after discussing the bases upon which he rejected Claims 1 to 4 inclusive.

I believe your question includes what was the final
21 disposition of Claim 4, and that was cancelled, and in

the remarks of the attorney in response to the rejection, which response is Amendment A, Paper No. 7, dated December 16th, 1948, there is this very definite statement, "Claim 4 has been cancelled", and it occurs at the conclusion of Paragraph 1 of the remarks, which reads in toto:

> "Applicant has amended Claims 1, 2 and 3, but for clarity and convenience these Claims have been completely rewritten and are presented as new Claims 5, 6 and 7, respectively."

Then occurs the statement, "Claim 4 has been cancelled."

Q. What have you to say as to whether the original Claims 1, 2 and 3, which were rewritten, contained a limitation as to a single continuous flange and then a plurality of spaced-apart flanges opposing the continuous flange?

A. In original Claim 1 there is this limitation:

22 " * * * an upper flange integral with said rubber housing and extending outwardly from and obliquely around said rubber housing * * * ", and then,

" * * * a rear flange integral with said rubber housing and extending outwardly therefrom adjacent the base of said rubber housing, said rear flange positioned directly beneath said upper flange and spaced slightly therefrom", and then,

" * * * a front flange integral with said rubber housing and extending outwardly therefrom", and then.

" * * * a side flange integral with said rubber housing and extending outwardly therefrom on two opposite sides of said rubber housing * * * "

Consequently in original Claim 1 we have a requirement or the recitation of one continuous flange and ad-

jacent to it four other separate flanges, one designated a rear flange and one a front flange, and the other two, two side flanges.

In original Claim 2 there is the express recitation of an upper flange extending around the outside of said rubber housing, and then four flanges on the front, rear and two sides of said rubber housing spaced slightly
23 from said upper flange.

In Claim 3, original Claim 3, there is a recitation of a continuous flange extending around the outside of the rubber housing and then a plurality of shorter flanges extending partially around the outside of said rubber housing, spaced slightly from the continuous flange, so that in each of the three original claims which have been rewritten there is the express limitation requiring a plurality or more than one flange facing a continuous flange.

Q. And such a limitation was not contained in the original cancelled Claim 4?

A. That is correct.

Q. Do you find such limitations in the Claims of the Patent as issued?

A. As issued the Claims of the Patent do contain those limitations which were present in the original Claims 1 to 3, namely, the recitation or the requirement for a continuous flange facing a series of disconnected or spaced-apart flanges.

Q. In Claim 3 will you state whether or not you can find anything in the socket B-1 as shown in the right-hand
24 panel of Chart No. 2, Plaintiff's Exhibit KK, that answers to Element 4 of that Chart reading:

> " * * * a plurality of shorter flanges extending partially around the outside of said housing and

spaced slightly from said continuous flange on a corresponding line"?

A. I cannot.

* * *

Q. Mr. Kohls, please refer to Chart No. 3. Chart
25 No. 3 will be given the designation of Exhibit P.

* * *

Mr. McKnight: At this time, in order to avoid constant repetition, your Honor, I would like to object to Exhibits P and W and to questions thereon as relating to an effort to attack the validity of the patent in suit.

I would like to have that continuing objection to anything that relates to P or W, because I feel it is a violation of the Order of the Circuit Court of Appeals, and I see no reason to repeat it every time.

The Court: All right. It may be understood that there is a continuing objection.

* * *

By Mr. Jones:

Q. Will you please refer to the socket, Plaintiff's Exhibit N, and Chart No. 3, Plaintiff's Exhibit P and explain to the Court what is shown by that chart?

Mr. McKnight: May I also at this time have the
26 same understanding as to Exhibit N, your Honor?

The Court: Yes.

Mr. McKnight: The same objection.

The Court: Yes.

* * *

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By Mr. Jones:

Q. Proceed, please, Mr. Kohls.

A. If I remember, I think the question concerned the relationship of Exhibit N * * * to the Chart, Exhibit
27 P * * * and the purposes of the Chart.

Q. Yes.

A. The purpose of the Chart of Exhibit N is illustrated in the right-hand panel of the Chart Exhibit P, and the entire purpose of the Chart is to show that the Plaintiff's contemporary socket, which is Plaintiff's Exhibit B-1, is more like what I understand to be prior art than it is like the Patent in suit.

Mr. Jones: I might state here, your Honor, that the illustration in the right-hand panel of the Chart, No. 3, illustrates one of the sockets that was proven up through the Warren depositions.

By Mr. Jones:

Q. Proceed, Mr. Kohls.

A. To portray this relationship or the similarity between the Plaintiff's contemporary socket with the socket Exhibit N, the essential elements of the socket have been paraphrased or have been set out in the center panel of the Chart and coloring has been applied to show the relationship of those designated elements to the illustrations on the left and the right-hand panels, the left
28 panel again being an illustration of the contemporary socket being made by the Plaintiff.

The moulded rubber housing, of course, is present in both, and that is indicated by the yellow color, and each socket, of course, has to have a screw threaded shell base inside of it to perform its function, that being in-

dicated by the color brown; and each socket has a pair of electric wires extending through the housing to connect the shell base with the source of current.

That, of course, is again essential and necessary for the socket to perform its function, and those wires have been shown by the application of the color green.

The next element I have indicated as an essential part of the socket in each instance is the continuous flange integral with the rubber housing which, in the application of the socket to its position of use, engages the outer face of the refrigerator wall surrounding the housing-receiving opening.

Perhaps the word "outer" ought to be clarified. It is
29 that face of the panel which is really inside of the wall and probably would be covered by insulation in the actual installation.

In each of the illustrated structures the color orange has been used to show the presence of that continuous flange.

Then the last of the essential elements of the structure or socket is the continuous flange integral with the rubber housing and slightly spaced from the first continuous flange to engage the inner face of the refrigerator wall surrounding the housing receiving opening.

This has been designated by the color blue applied in both illustrations, in the left and right-hand panels of the Chart respectively, the contemporary socket and the early Packard socket, which I understand to be prior art.

Q. Refer back to Chart No. 2, Exhibit KK, and Claim 3 of the Patent which is reproduced there.

A. Yes.

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Q. What element or elements if any of Claim 3 are missing from the early Packard socket, Exhibit N, shown in the right-hand panel of Chart No. 3, Exhibit P?

30 A. A plurality of shorter flanges extending partially around the outside of the housing and spaced slightly from the continuous flange, which in Chart No. 3, Exhibit KK, is designated by the very brilliant red color.

That element of Claim 3 is clearly not present in either the contemporary structure of the Plaintiff or the early Packard socket shown in the right-hand panel of Chart KK, or Exhibit KK.

Q. Refer back to Chart No. 3, Exhibit P.

A. Yes.

Q. What have you to say as to whether the illustration in the right-hand panel is a faithful and accurate illustration and reproduction of the socket, Exhibit N.

A. It is as faithful a reproduction as could be made, in my estimation.

Q. Will you please refer to Chart No. 1, which will be offered in evidence later as Plaintiff's Exhibit W, and also refer to the socket, Plaintiff's Exhibit R, which was identified and proved in the Warren depositions.

A. Yes.

Mr. McKnight: The same objection as to Exhibit R
31 continues, your Honor?

The Court: Yes. That is understood.

* * *

By Mr. Jones:

Q. Referring to Chart No. 1, will you please inform the Court what if anything that Chart is intended to por-

tray, first, stating as to what the illustrations are in the left and the right-hand panels?

A. In the left-hand panel of the Chart, Exhibit W, there is the same reproduction of Figs. 1, 2 and 3 of the drawings of the Holloway Patent as are present in the Chart, Exhibit KK, and in the right-hand panel of the Chart, Exhibit W, is a reproduction, as slavishly accurate as possible, of the socket marked for identification as Plaintiff's Exhibit R.

The intent of the chart is to show that the patent in suit, and particularly Claim 3, which has been reproduced in the center panel of the chart, is restricted by the
32 Packard 1941 socket.

That is, in interpreting the Claim or Claims of the Patent, one would have to take into consideration the socket represented on the right-hand panel and which is identified as the Packard 1941 socket.

Q. Now, Mr. Kohls, will you please refer to this new Patent, which is Patent No. Reissue 20,585, reissued December 14, 1937, to F. C. Kollath, which will be marked Plaintiff's Exhibit HH.

A. Yes.

* * *

Q. Also refer to Patent No. 2,099,405, issued November 16, 1937, to J. D. Langdon, which will be marked Plaintiff's Exhibit II.

A. Yes.

* * *

Q. Also refer to Patent No. 2,277,468, issued March
33 24th, 1942, to R. C. Welch, which will be marked Plaintiff's Exhibit JJ.

A. Yes.

* * *

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Mr. McKnight: May I have the same objection continuing as to those Exhibits, your Honor?

The Court: Yes. The same objection will stand.

By Mr. Jones:

* * *

Q. Will you please refer to the Kollath Patent, Reissue 20,585, and tell us what if anything you find in common between that socket and the Plaintiff's contemporary socket, Exhibit B-1?

A. There, of course, is everything in common, but germane to the issue here before us, I think the fact that
34 the Kollath Patent, Reissue 20,585, shows two adjacent flanges designated 35 and 36 on the patent drawing, and circling the socket, the body of the socket, is perhaps the most essential and important similarity between the patent and the contemporary structure.

Q. Now, referring to Patent 2,099,405 to Langdon, Plaintiff's Exhibit II, will you tell us what if any similarities you find between the structure of the socket of that patent and the Plaintiff's contemporary socket, Exhibit B-1?

A. Again I would take for the purpose of the question here before us, as the essential and important similarity between the patented disclosure, that is, the disclosure of the Langdon Patent 2,099,405 and the Plaintiff's contemporary socket, the fact that it, that is, the patent, like the contemporary socket, has two facing elements which comprise or constitute flanges, two facing flanges which between them define a groove designated on the patent drawing by the letter "c", and which in the specification of the patent is defined as being a neck portion and is intended to receive, as shown in Fig. 4, the

adjacent edge of the hole in the panel into which the
35 socket is fitted.

I would also like to point out that in my estimation the disclosure of the Langdon Patent has this in common with the contemporary Plaintiff's socket, and that is that when the socket of the Langdon Patent is in position on a supporting panel, it effectively seals the opening into which it has been inserted.

Q. What have you to say as to whether the Langdon Patent calls for the socket being made of resilient material?

A. Yes. It definitely does.

Q. Will you refer to page 1 of the specification, the right-hand column, Line 24 to 25, and tell us if you find such?

A. In the designated portion of the specification the language reads:

> "Fig. 3 shows the section view of the resilient socket at 3-3 having a narrow neck portion C formed by a shallow external groove surrounding the external circumference of the resilient socket 3 adapted to be impinged by the material surrounding the aperture B of the flexible extended portion 2."

36 Q. In speaking of the resilient portion he is speaking there however of Fig. 2?

A. That is right.

Q. Translating it down to Fig. 4, what have you to say as to whether the material would have to be more or less squeezed into place?

A. It definitely would have to, and the patentee in defining or referring to Fig. 4 states:

> "Fig. 4 illustrates the socket 3 after having been forced through a hole previously made of suitable

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size to receive said socket, which may thus be installed through any suitable material of the body to which the socket is to be attached."

In other words, the panel 10 could be of any suitable material, metal preferably, I suppose, but in every instance it would definitely have to be resilient, and in Fig. 3, which is a sectional view through the socket shown in Fig. 4, the cross-sectioning used is that conventionally employed by patent draftsmen to indicate resilient material or rubber.

Q. Now, referring to Patent No. 2,277,468, issued
37 March 24th, 1942, to R. C. Welch, which has been marked Plaintiff's Exhibit JJ for identification, what if any features do you find in that Patent that are common to the Plaintiff's contemporary socket B-1?

A. Again, as in connection with the other two patents I have discussed, the Welch Patent 2,277,468 has many features in common with the contemporary Plaintiff's socket, but perhaps most important is the fact that it provides or has a pair of opposed flanges, continuous flanges extending around the body of the socket to define a neck or groove designated by the numeral 25 seen, for instance, in Fig. 5 of the patent drawing of the Welch Patent, which neck or groove receives the arms 27 of the fastening bracket or supporting bracket by which the socket is screwed to a supporting wall.

The body of the socket of the Welch Patent like the body of the contemporary Plaintiff's socket is of resilient material, resilient insulating material.

* * *

39 Q. Mr. Kohls, I hand you Plaintiff's Exhibit Q, which
40 is a Packard-Westinghouse socket, and ask that you compare it with the Defendant's contemporary socket Exhibit

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B-1, and tell us what features if any the two have in common.

Mr. McKnight: I object to Plaintiff's Exhibit Q and any further reference to it, directly or indirectly, as in violation of the ruling of the Circuit Court of Appeals that the validity of the patent cannot be contested.

Mr. Jones: This is not put in for that purpose, your Honor. I am putting this in to show that we are following the prior art.

Mr. McKnight: I object to it for both purposes.

The Court: The objection may be noted.

By Mr. Jones:

Q. Proceed, Mr. Kohls.

A. Both sockets which I hold in my hand, one of them Exhibit B-1 and the other marked Exhibit Q, have their bodies formed of resilient rubber, both of them having a conventional metal lamp receptacle, or rather, the lamp socket, and both of them have a pair of opposed continuous flanges extending diagonally around the body of the socket.

41 In my estimation I would say that Exhibit Q has everything that is present in Exhibit B-1.

Mr. Jones: You may cross examine.

* * *

Cross Examination

By Mr. McKnight:

* * *

42 Q. Well, now, have you, as Mr. Jones has suggested, testified in patent litigation before?

43 A. Yes, I have.

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Q. In a number of cases?

A. Quite a number of cases.

Q. On behalf of cases in your own office, or in connection with Mr. Jones' office?

A. Perhaps they have been limited to cases that have arisen in connection with our office, or in which the office had a part.

Q. And you are working now for Mr. Jones, attorney for the Plaintiff in this case?

A. Yes.

* * *

46 Q. Now, I call your attention to Defendant's Exhibit O.

A. Yes.

Q. I ask you if O is the same as Plaintiff's Exhibit B-1.

A. It is the same. About the only difference I see between the two is that Exhibit O has the insulation of two conductors showing in the head end or base end of the socket, whereas Exhibit B-1 does not have such.

* * *

47 Q. Now, looking at Exhibit B-1, doesn't there appear to be a break between the upper and lower flanges on the rear portion thereof?

A. Let's first identify what you consider the rear portion, so we speak of it in the same respect.

Q. Well, the rear portion is the portion that is back of the ice box partition.

Does that portion I am showing you now appear to be that portion?

A. The portion you have indicated, yes, would be the part of the socket body that would be behind the panel * * * and that would be identified as the rear portion?

Q. That is right.

A. All right.

Q. Mr. Kohls, would you say there appears to be an upper and lower flange there instead of one continuous flange?

A. Well, I see two flanges, both of them continuous,
48 around the entire — diagonally around the entire body, one which would lie forwardly of the panel and the other rearwardly of the panel.

Q. I am talking about the rear surface. Don't you find an upper and lower flange there in that rear portion?

A. I honestly don't know what you mean by "upper" and "lower" portion, Mr. McKnight.

Q. Well, let's hold it with the socket about like this (indicating).

A. All right.

Q. Do you find a portion where my thumb is that is one flange (indicating), and the portion where my thumb is now again another flange (indicating), or do you find that only as one flange?

A. I find that only as one flange. (Indicating.)

Mr. Jones: You pointed to the rear portion?

The Witness: To the only portion of the flange which is adjacent to the open end of the socket, and the other portion you indicated, which I would say would be adjacent to or protruding from the rear portion of the socket,
49 but they are just two portions of the same continuous flange.

* * *

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Redirect Examination

By Mr. Jones:

50 Q. Mr. Kohls, state whether or not you have ever been called upon to work on electrical matters for any of the following companies: Allen Bradley Company, Marathon Electric Manufacturing Company, Louis Allis & Company, Chicago Telephone Supply Company, John Oster Manufacturing Company, Briggs & Stratton Corporation and the Square D Corporation?

A. For all of those companies I have prepared and filed applications for patent, and in connection with all those companies I have worked with their engineers on many matters pertaining to electrical inventions.

* * *

57 Mr. McKnight: I have a very short statement of objection.

No objection as to A, A-1 and B.

Objection to Exhibits C and D as having been disposed of by Judge Sullivan and the Court of Appeals on unfair competition.

Exhibits E down through and including EE are objected to on the grounds that they are attempts to bring out invalidity, if possible, of the patent and that they are precluded from doing so as I previously stated in my objections to your Honor.

There is no objection to the Holloway Patent, FF, or to the file history, GG.

There is objection to Plaintiff's Exhibits HH and KK on the ground that they are also an attempt to attack the validity of the patent in suit.

The Court: The objections may be noted.

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58 Mr. Jones: Now, if the Court please, this Court has repeatedly ruled against the Plaintiff in connection with attempts to obtain evidence by discovery proceedings to support Plaintiff's affirmative cause of action for avoidance ab initio of the license agreement between the parties on the ground of fraud in the procurement of the Holloway patent.

Your Honor will recall that this question was last raised by Defendant's motion to quash a subpoena duces tecum served upon the president of the Defendant corporation. In a letter opinion to counsel for the Plaintiff, dated April 8, 1954, this Court said:

> "* * * In effect, your client, a licensee, is still attempting to attack the validity of the patent, and the discovery procedures sought to be followed are directed to the same types of information as to which Judge Sullivan has already ruled."

This opinion was followed by a formal docket order entered April 30, 1954, granting the motion to quash.

59 By its letter just referred to, the Court specifically declined to advise Plaintiff in the presentation of its case. Although the cause of action for avoidance of the patent still stands in the pleadings — remember there has been no motion to strike — it is apparent that plaintiff is largely deprived of the means to prove its cause of action, and I presume that this is tantamount to a holding that the pleaded cause of action will not lie. If the Court so desires, and expressly requests it, I am prepared to orally argue the question of whether Plaintiff is entitled to assert a cause of action for avoidance of the license agreement on the ground of fraud in the procurement of the patent.

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In any event, to preserve Plaintiff's rights on appeal, I would like at this time to make the following perfunctory offer of proof.

The Court: You may proceed.

Mr. Jones: Plaintiff offers to prove that in 1941 the Packard Electric Division of General Motors Corporation had begun the manufacture and sale of a refrigerator light socket which anticipated the claims of the Holloway patent completely and in every detail. This would
60 be shown by Exhibits F, G, H, J, K and L of the depositions taken in this case at Warren, Ohio on September 6, 1950.

Now, I would like to have the Court segregate the Warren depositions and the Exhibits, or place them in two classes.

They are competent and are before the Court to show that the contemporary socket, Exhibit B-1, is following the prior art and that in view of the prior art the Defendant cannot stretch or strain the language of its Claim 3 to read thereon, and I feel that for that purpose I need make no argument for the depositions.

This argument merely goes as offering them for the purpose of showing fraud and for asking that the contract of the license be declared void ab initio.

Now, by mid-1947, more than one year before application was filed for the Holloway patent, Packard Electric Division submitted a similar socket, also anticipatory of the Holloway patent, to the Mansfield Works of Westinghouse Electric Corporation, along with quotations.

In August, 1947 Westinghouse completed its drawing
61 5-C-3580, showing a socket which differed somewhat in appearance from the Packard socket, but which was no

different therefrom in function or principle. However, this Westinghouse socket was so nearly identical with the socket shown in the drawings of the Holloway patent as to be indistinguishable therefrom without the most careful scrutiny.

On August 5, 1947 Westinghouse released its drawing 12-B-3195 specifying that the socket of drawing 5-C-3580 —just mentioned—was to be used in Westinghouse's 1948 refrigerator.

The purpose of the foregoing is to establish that if Holloway independently conceived the socket of the Westinghouse 5-C-3580 drawing, his showing it to Westinghouse constituted public use more than one year before he filed the patent application, by which use the patent is invalidated; and if he did not conceive it, the patent is ipso facto invalid.

On August 6, 1947 Westinghouse issued its purchase order No. 80-115907 to Holwin for a 48-cavity mold at
62 a cost of $1,000.00. The Holwin socket No. 4100 was produced in the 48-cavity mold, and the cavities were formed to mold the designation "Holwin 4100" in each socket made therefrom. Rubber sockets made from this mold were originally produced by Frost Rubber Company, Chicago, Illinois.

Westinghouse's first purchase order for light sockets of assembly drawing 12-B-3195 was issued to Holwin Corporation on November 24, 1947, purchase order No. 119063. The first shipment of these sockets was received by Westinghouse on December 7, 1947, and they were first installed January 16, 1948, starting with Westinghouse's D-7-48 refrigerator. Westinghouse thereafter continued to use the same socket for several years.

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On December 18, 1947, Westinghouse issued its purchase order 80-134884 on Holwin Corporation for $1,800.00 for a 54-cavity mold to produce lamp sockets for the 12-B-3195 assemblies. All cavities in this mold are marked "Westinghouse 1385300". Holwin ordered this mold from the Johnson-Sperry Company, Middlefield, Ohio, who in turn had the mold made at Houk Machine
65 Company, 388 Newall Street, Barberton, Ohio. Johnson-Sperry then shipped the mold to the Wise Allied Products Company in Ada, Ohio, who produced lamp sockets from it which were then sent to Holwin Corporation and assembled by it into wiring harnesses for Westinghouse. This mold later went to Chardon Rubber Company, Chardon, Ohio.

The purpose of the foregoing is to establish that Stephen R. Loughman, secretary-treasurer of the Holwin Corporation, must have known, at the time he executed the affidavit in support of the petition to make special in the Holloway patent application, that there was no foundation in fact for his statement therein that Holwin Corporation "would not manufacture extensively" refrigerator sockets embodying the subject matter of the application "unless it is certain that the patent will be granted."

The foregoing is merely a sketchy outline of the complete proof that Plaintiff can present, given merely to preserve its rights on appeal and to show that Plaintiff asserts in good faith its cause of action for judicial nullification of the license agreement.

64 Mr. McKnight: I object to that again, your Honor. This is about the sixth time we have had this offer introduced, and I make the same objection as a matter of record.

Mr. Jones: This is the first time I have had an opportunity to make a record of it for the Court of Appeals.

The Court: All right, sir. The record will show your offer and the objection. You may proceed.

* * *

68 *Direct Examination of William Puetz*

By Mr. McKnight:

* * *

78 Q. Now, calling your attention to Defendant's Exhibit O, I will ask you how many flanges appear upon the rear side of this socket, and by that I mean the side that is on the outside of the ice box in the same position as the socket was positioned in Exhibit 1? Do you understand what I mean?

* * *

A. I see two flanges.

Q. Would you explain to the Court what you mean by that answer?

A. Well, I think the only way I can qualify this answer is that generally in the design of both tools and sockets, of which I have designed a number very similar, with a number of single-cavity experimental molds, it is very common practice to refer to these flanges as such as actual embossments, and in constructing such a mold it
79 would become a job of producing more than one to create a flange, and that is what appears to me here as an upper and a lower flange or embossment, and as the two lie on a common perimeter they are adjacent to one another and not, therefore, connecting, so to qualify my statement I see both an upper and a lower flange.

* * *

Page of Transcript

80 Q. Now, can you explain to us why you think there are two flanges instead of one?

A. Well, again, as to the method of laying this thing out, if you were to make a drawing of this thing, or if you were to make a drawing of the tool to produce it, you would actually be laying out two of these embossments to create a flange, or two flanges, one upper and one lower.

Now, the toolmaker actually does the same thing when he builds a suitable tool to produce this. He thinks of these always as a number of projections or embossments in order to produce this flange effect.

As he has produced an upper flange and lower flange, or upper and lower embossments and blended them in, he has actually made two separate and distinct set-ups.

Generally speaking we at the Holwin Corporation * * *
81 would think of this as being two separate flanges.

* * *

87 *Cross Examination*

By Mr. Jones:

* * *

88 Q. Please refer to the patent in suit, Mr. Puetz, the Holloway Patent, and particularly Fig. 1.

A. Yes.

Q. Now, using your theory of flanges which you apply to the Plaintiff's device, do you not find more than one flange in Fig. 1?

A. (No answer.)

Q. Rationalizing it the same way you rationalized with respect to the Plaintiff's device.

A. As I look at Fig. 1, yes, I only see one flange

Q. Now —

A. As I look at the view in Fig. 1.

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Q. Using the rationalization that you used with respect
89 to Plaintiff's device, is that not a flange, one flange there (indicating)?

I am referring now, if the Court please, to the lowermost portion of that socket as shown in Fig. 1.

Will you answer that yes or no?

A. (No answer.)

Mr Jones: If the Court please, I would like to so request such an answer.

The Witness: I would like to ask something here to clarify something before I answer it.

Pictorially, as I see this thing, I can't answer the question, but since I know the part and I know exactly what it is, can I refer to the side view here as I see it?

I realize this is one flange, or functioning as one flange, but it consists of a number of embossments. I will answer the question by saying "Yes."

Mr. Jones: That is a separate flange.

By Mr. Jones:

Q. Now, referring to Defendant's Exhibit 1 and the flange that is at the lower portion on the white side, that is, adjacent to the open socket, that also is a flange; using
90 the same rationalization you used in connection with the Plaintiff's device?

A. No. The reason why I would answer that this (indicating) is a flange is merely because I can't see it because of these projections, but this is very continuous, very continuous (indicating), completely around.

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There is where I say that there is one flange as I look at this view, or the view that you have asked me to look at in Fig. 1.

Q. But looking at the Patent, Fig. 1, using the rationalization that you used with the Plaintiff's device, Fig. 1 shows more than one flange, the patent drawing?

A. No, it does not.

Q. Well, just look at the patent in front of you.

A. I am.

Q. You just said that was a flange, a separate flange shown on the patent in the lower part of Fig. 1 in your previous answer.

* * *

91 A. All right. Fig. 1 shows one complete flange, a continuous flange.

Q. Now, watch as I outline or trace this flange on Exhibit B-1. Is that not a continuous flange, unbroken?

A. Referring to this side (indicating), yes, it is.

Q. I am referring to the rear side. Is that not an unbroken flange?

A. It is been broken.

Q. Where?

A. At the point that the upper and the lower flange meet.

Q. Now, is there not a continuous groove all the way around so that at no point can I pull the pencil out?

A. There is a continuous groove, but it can be pulled out at the point that the upper and the lower flange meet.

* * *

Page of Transcript

92 Q. Is there not a ridge — let's call it that — an unbroken ridge all of the way around this Exhibit B-1?

A. There's a groove; there's a groove.

Q. Yes, and therefore this flange on the rear defines the rear wall of that groove, does it not?

A. * * * Yes, but the pencil was confined only so long as you forced it against the front wall.

93 Q. Well, is it not —

A. It wouldn't have — what I started to say a minute ago was that if you were to mount the thing using only the front flange, or physically remove the two back ones, the upper and the lower, naturally it would not stay.

* * *

95 Q. Is it not a fact that it is an uninterrupted, unbroken groove all the way around there, on Exhibit B-1?

A. It is an uninterrupted groove.

* * *

97 Q. Now, taking Exhibit B-1 and merely for the purpose of argument assuming that you are right on this more than one flange, tell me: Where does the bottom flange end — and when I speak of "bottom", I am speaking of the open end —

98 A. Yes.

Q. (Continuing) — on Plaintiff's Exhibit B-1?

A. I can point to it.

Q. I want you to point to it and then I will put it in the record, where you are pointing.

A. I am pointing (indicating) where this line meets — in other words, this flat surface (indicating) meets this radius, at a point tangent to the two.

Page of Transcript

Q. You are indicating at the point where the top of the socket portion —

A. No. Where this surface (indicating), this flat surface (indicating) blends into this one running this way (indicating).

* * *

99 Q. Now, will you please point to me where the top rear flange terminates?

A. There is no termination point.

* * *

FINDINGS OF FACT AND CONCLUSIONS OF LAW

252 Plaintiff filed an action for a declaratory judgment that a refrigerator light socket which plaintiff now manufactures and sells infringes no claim of defendant's letters patent.

Defendant counterclaimed for royalties under a license agreement between plaintiff and defendant on the ground that the said socket is made in accordance with defendant's patent and does infringe it.

Plaintiff also sought to have defendant's patent declared void ab initio. The United States Circuit Court of Appeals, 7th Circuit, *United Mfg. & Service Co. v. Holwin Corp.*, 1951, 187 F. 2d 902, held that the license between plaintiff and defendant had not been repudiated as claimed by plaintiff. Plaintiff, as licensee, was, therefore, estopped to deny the validity of the patent. Both parties pleaded causes of action for unfair competition which have been dropped out of the case.

253 The case came on for hearing before the Court on the pleadings and the evidence, consisting of oral testimony, documentary proofs, and physical exhibits. Witnesses were called by the respective parties, whose testimony was transcribed in the record. The Court has had the benefit of argument of counsel on briefs, has weighed carefully the arguments presented and considered the authorities advanced by respective counsel in support of their respective claims.

Upon a consideration of the whole case, the Court makes the following:

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FINDINGS OF FACT

1. Plaintiff is a Wisconsin corporation having an office and place of business at Milwaukee, Wisconsin.

2. Defendant and counterclaimant is an Illinois corporation having an office and place of business in Chicago, Illinois.

3. Defendant is now and has been since prior to July 15, 1949, the owner of United States Letters Patent to Holloway, No. 2,460,636, issued February 1, 1949, for Improvement in Self-Sealing Electric Light Sockets for Refrigerator Panels.

4. Defendant granted a license on said patent No. 2,460,636 to plaintiff on July 20, 1949.

5. Plaintiff made and sold self-sealing electric light sockets for refrigerator panels under its license agreement with defendant and paid royalties thereunder until September 16, 1949.

6. The license agreement between defendant and plaintiff has been since its execution, and is now in existence and in full force and effect.

254 7. Defendant's said patent No. 2,460,636 provided for the first time an electric light socket for a refrigerator panel having a groove to be fitted without need of a tool into a non-circular opening in the panel and by means of flanges on opposite sides of the groove to hold the socket in position against turning, with a moisture proof seal.

8. Defendant's socket made in accordance with patent No. 2,460,636 was accepted by the trade and enjoyed commercial success.

9. The sockets made and sold by plaintiff as shown by plaintiff's Exhibit A-1 are admitted by plaintiff as coming

within the scope of the claims of defendant's patent aforesaid and the license agreement between the parties.

10. On September 16, 1949, plaintiff began to manufacture its contemporary socket, represented by plaintiff's Exhibit B-1 and Defendant's Exhibit O. Plaintiff has manufactured the contemporary socket continuously and exclusively since that date.

11. Plaintiff's contemporary socket differs from that shown in plaintiff's Exhibit A-1 in that the first has two opposing flanges, each of which extends continuously around the body of the socket and which cooperate to define a single groove extending around the socket. It is defendant's contention that the contemporary socket has not one, but two, flanges cooperating with a single opposed flange to define the groove. The drawings of the Hoard design patent No. D-156,730 of January 3, 1950, do show what appear to be a pair of flanges on one side of the groove. However, the physical exhibits, plaintiff's Exhibit B-1 and defendant's Exhibit O, do not bear out this appearance. The socket shown in plaintiff's Exhibit A-1 has one continuous flange extending uninterruptedly
255 around the socket and a plurality of shorter flanges cooperating therewith to define several short, discontinuous grooves spaced at intervals around the socket.

12. Plaintiff's contemporary socket is admittedly the same in function, operation and result as the socket shown in plaintiff's Exhibit A-1.

13. Plaintiff's contemporary socket is the equivalent in construction, function, operation and result of plaintiff's socket as shown in Exhibit A-1. There are no patentable differences between the said sockets.

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14. Defendant concedes that its claim #3 is the broadest claim of the defendant's patent aforesaid, and that its counterclaim must be dismissed if the plaintiff's contemporary socket does not come within the scope of claim #3.

15. Claim #3 of the defendant's patent aforesaid describes a socket with one continuous flange and "a plurality of shorter flanges extending partially around the outside" of the socket housing.

16. When the application for the defendant's patent aforesaid was originally filed, it included an original claim #4 which called for "a plurality of oppositely disposed flanges spaced slightly from each other on the outer surface of said rubber housing, * * *" It is plaintiff's contention that this language would read on plaintiff's contemporary socket.

17. Plaintiff argued that defendant was resorting to the doctrine of equivalents to recapture claims surrendered by amendment. File wrapper estoppel arises as to claims amended or cancelled to overcome rejection. In the instant case, the file wrapper shows that the patent
256 officer originally rejected all of the original claims #2, #3 and #4 under one heading, on the theory, later apparently abandoned, that they were the full equivalent of what was found in Welch and Langdon wherein the spaced flanges were said to function as did the plurality of flanges in the defendant's patent aforesaid. No distinction was made by the examiner between claim #3 (later re-written) and claim #4 (later cancelled). It is plaintiff's position that claim #4 which did read on plaintiff's contemporary socket was cancelled to overcome rejection and that defendant was thus estopped to

claim infringement. However, the claims as re-written and allowed still contained the plurality of flanges to which the examiner initially objected. The patentee did not overcome the rejection by restricting the claims to plural flanges but by explanation of the differences between the subject invention, and the prior art. The Court finds that file wrapper estoppel does not apply in this case.

18. The contemporary sockets made and sold by plaintiff, as shown by defendant's Exhibit O and plaintiff's Exhibit B-1, do come within the scope of claim #3 of defendant's patent No. 2,460,636 and the license agreement between the parties.

19. During the trial of this action plaintiff introduced evidence of prior art which was considered solely on the question of limiting the claims of the defendant's patent aforesaid. Consideration of the prior art did not indicate that defendant's claims were so limited as to exclude the contemporary socket of plaintiff.

CONCLUSIONS OF LAW

1. This Court has jurisdiction of this case under the
257 patent laws of the United States and because of diversity of citizenship of the parties.

2. Defendant's patent No. 2,460,636 has been presumed valid. As plaintiff is a licensee of defendant under defendant's patent aforesaid, plaintiff is estopped to contest the validity of said patent. Plaintiff's assertions of fraud constitute an attempt to contest the validity of the patent.

3. Plaintiff's contemporary socket as shown by plaintiff's Exhibit B-1 and defendant's Exhibit O, and plain-

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tiff's socket as shown in plaintiff's Exhibit A-1 all infringe claim #3 of defendant's patent aforesaid and come within the terms of the license agreement between the parties.

4. Claim #3 of the defendant's patent aforesaid is not limited by any of the prior art, offered by plaintiff to show the state of the art, so as to exclude the contemporary socket of plaintiff.

5. Claim #3 of the defendant's patent aforesaid was allowed by the Patent Office over the prior patents to Welch and Langdon urged by the plaintiff.

6. There is no file wrapper estoppel limiting the scope of claim #3 of defendant's patent aforesaid.

7. Defendant is entitled to:

(a) judgment against plaintiff with interest at legal rates from the dates due for all royalties under the license agreement between the parties at the contract rate of 1c per socket for all sockets made and sold by plaintiff within the terms of said agreement, from September 16, 1949, to date, including such sockets as shown in plaintiff's Exhibits A-1, and B-1 and defendant's Exhibit O, and order on plaintiff to pay such royalties to defendant in the future
258 during the life of the said license agreement in accordance with the terms thereof.

(b) referral of this cause to a Master in Chancery, to be approved by this Court, for accounting and determination of the damages suffered by defendant by reason of plaintiff's non-payment of royalties under its said license agreement with defendant.

(c) dismissal of plaintiff's complaint for declaratory judgment.

(d) award of defendant's costs and disbursements in this action.

8. All objections to introduction of evidence raised by either party, as to which the Court has not previously ruled, are hereby overruled.

An order in conformity with the foregoing may be presented to the Court within 30 days from the date hereof.

/s/ Win G. Knoch
United States District Judge

Date: Aug. 2, 1956.

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JUDGMENT

260 This cause coming on to be heard upon the pleadings, the evidence presented by the witnesses at the trial, the depositions and exhibits of the parties, and briefs filed herein and the Court being fully advised,

It is Hereby Ordered, Adjudged and Decreed:

1. That plaintiff's complaint for declaratory judgment be and the same is hereby dismissed.

2. That the claims for unfair competition set up in the complaint and counterclaim be and the same are hereby dismissed.

3. That defendant's counterclaim is otherwise hereby sustained.

4. That defendant's Patent No. 2,460,636 issued February 1, 1949 for SELF-SEALING ELECTRIC LIGHT SOCKET FOR REFRIGERATOR PANELS, involves invention and is valid and has enjoyed commercial success.

5. That the license agreement between defendant and plaintiff has been since its execution, and is now in full force and effect.

6. That plaintiff's contemporary socket as shown by plaintiff's Exhibit B-1 and defendant's Exhibit O, and plaintiff's socket as shown in plaintiff's Exhibit A-1 all come within the scope of claim #3 of defendant's patent aforesaid and come within the terms of the license agreement between the parties.

7. That a judgment be entered against plaintiff in favor of defendant with interest at legal rates from the dates due for all royalties under the license agreement

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261 between the parties at the contract rate of 1c per socket for all sockets made and sold by plaintiff within the terms of said agreement, from September 16, 1949, to date, including such sockets as shown in plaintiff's Exhibits A-1, and B-1 and defendant's Exhibit O, and order on plaintiff to pay such royalties to defendant in the future during the life of the said license agreement in accordance with the terms thereof, the amount of said judgment and interest to be determined and entered by this Court.

8. That this cause be referred to Ferre C. Watkins, a Special Master in Chancery of this Court for accounting and determination of the amount of the judgment and interest provided in paragraph 7 hereof and for accounting and determination of the damages suffered by defendant by reason of plaintiff's non-payment of royalties under its said license agreement with defendant.

9. That defendant be awarded its costs and disbursements in this action.

Entered at Chicago, Illinois, this 17th day of September, 1956.

/s/ Win G. Knoch
United States District Judge

NOTICE OF APPEAL TO COURT OF APPEALS

[Filed September 27, 1956]

Please take notice that United Mfg. & Service Co., now by change of name Unilectric, Inc., plaintiff above named, hereby appeals to the United States Court of Appeals for the Seventh Circuit from the Final Judgment entered in this action on September 17, 1956.

/s/ Ira Milton Jones

110 East Wisconsin Avenue
Milwaukee 2, Wisconsin
Counsel for Plaintiff

September 25, 1956.

EXTRACTS FROM THE FILE HISTORY OF THE PATENT TO CHAS. M. HOLLOWAY, NO. 2,460,636

ORIGINAL CLAIMS 1-4, ACCOMPANYING THE SPECIFICATION AND DRAWINGS

Filed Sept. 9, 1948

1. An electric light socket for refrigerator panels comprising an outer molded rubber housing having a hollow interior with a front opening adapted to receive an electric light bulb, a screw-threaded shell base mounted within the interior of said rubber housing, a pair of electrical wires extending through the base of said rubber housing for connecting said shell base to a suitable source of electrical supply, an upper flange integral with said rubber housing and extending outwardly from and obliquely around said rubber housing, a rear flange integral with said rubber housing and extending outwardly therefrom adjacent the base of said rubber housing, said rear flange positioned directly beneath said upper flange and spaced slightly therefrom, a front flange integral with said rubber housing and extending outwardly therefrom adjacent the front opening of said rubber housing, said front flange positioned directly beneath said upper flange and spaced slightly therefrom, a side flange integral with said rubber housing and extending outwardly therefrom on two opposite sides of said rubber housing, said side flanges positioned directly beneath said upper flange and spaced slightly therefrom, a pair of lamp guard receiving members integral with said rubber housing and extending outwardly therefrom on two opposite sides of said rubber housing, said lamp guard receiving members comprising straight portions

spaced slightly from and parallel to each other adjacent said upper flange, and openings in said rubber housing between each pair of said receiving members adapted to receive the ends of a lamp guard, said socket adapted to be installed by hand in an opening in a refrigerator panel so that said flanges grip the edges of the opening and hold the edges in the space between said upper flange and said front, rear and side flanges so that said socket may not be accidentally turned or removed and said upper flange contacts the face of the refrigerator panel around the entire circumference of the opening to provide a moisture proof seal around said opening.

2. An electric light socket for refrigerator panels comprising an outer molded rubber housing having a hollow interior with a front opening adapted to receive an electric light bulb, means for connecting said socket to a suitable source of electrical supply, an upper flange extending around the outside of said rubber housing, four flanges on the front, rear and two sides of said rubber housing spaced slightly from said upper flange, all of said flanges being integral with said rubber housing, said socket adapted to be installed in an opening in a refrigerator panel so that said flanges grip the edges of the opening and hold the edges in the space between said upper flange and said front, rear and side flanges, so that said socket may not be accidentally turned or removed and said upper flange contacts the face of the refrigerator panel around the entire circumference of the opening to provide a moisture proof seal around said opening.

3. An electric light socket for refrigerator panels comprising an outer molded rubber housing having a hollow interior with a front opening adapted to receive an electric light bulb, means for connecting said socket to a

suitable source of electrical supply, a continuous flange extending around the outside of said rubber housing, a plurality of shorter flanges extending partially around the outside of said rubber housing and spaced slightly from said continuous flange, all of said flanges integral with said rubber housing, said socket adapted to be installed in an opening in a refrigerator panel so that said flanges grip the edges of the opening and hold the edges in the space between said continuous flange and said shorter flanges, so that said socket may not be accidentally turned or removed and said continuous flange contacts the face of the refrigerator panel around the entire circumference of the opening to provide a moisture proof seal around said opening.

4. An electric light socket for refrigerator panels comprising an outer housing having a hollow interior with an opening adapted to receive an electric light bulb, means for connecting said socket to a suitable source of electrical supply, a plurality of oppositely disposed flanges spaced slightly from each other on the outer surface of said rubber housing, said socket adapted to be installed in an opening in a refrigerator panel so that said flanges grip the edges of the opening and hold the edges in the space between said oppositely disposed flanges, so that said socket may not be accidentally turned or removed.

PETITION TO MAKE SPECIAL

Filed Sept. 29, 1948

[Formal portions omitted]

Comes now the petitioner, Charles M. Holloway, the inventor and applicant herein, and respectfully shows by the hereto attached affidavits that a delay upon the application for Letters Patent will probably cause said petitioner serious and irreparable injury unless action be given by the Patent Office upon said application to the end of granting substantial protection under this said invention.

Your petitioner therefore requests the Commissioner of Patents to issue an order under Rule 63 advancing said application for examination at the earliest possible date.

AFFIDAVIT OF S. R. LOUGHMAN IN SUPPORT OF PETITION TO MAKE SPECIAL

Filed Sept. 29, 1948

[Formal portions omitted]

S. R. Loughman, being first duly sworn, deposes and says that he is Secretary-Treasurer of Holwin Corporation of Chicago, Illinois; that said company is ready, willing and able to manufacture electric light sockets embodying the features of the invention of Charles M. Holloway as set out in his application for patent thereon filed in the United States Patent Office on Sept. 9, 1948, and that it:—

1. Has sufficient capital in excess of $5,000.00 and facilities including a factory which is now and has been

in operation for several years, having adequate space, equipment and labor to manufacture the product in quantity.

2. Will not manufacture extensively unless it is certain that the patent will be granted.

3. Obligates itself to manufacture the invention in quantity immediately upon the allowance of claims which will protect the investment.

Affiant further pledges as evidence of good faith that if the application is allowed that within three months of the allowance he personally will furnish, for Holwin Corporation, a statement under oath showing:

1. How much money has been expended in the manufacture of the device.

2. The number of devices manufactured.

3. The extent to which manufacture has increased the employment of labor.

Affiant states that he is an Officer of Holwin Corporation and that the Board of Directors has authorized him to make this affidavit and to obligate Holwin Corporation to manufacture the invention in quantity immediately upon the allowance of claims that will protect the investment.

[Executed Sept. 27, 1948, before Joyce Meyer, Notary Public, Cook County, Illinois.]

AFFIDAVIT OF JAMES R. McKNIGHT IN SUPPORT OF PETITION TO MAKE SPECIAL

Filed Sept. 29, 1948

[Formal portions omitted]

James R. McKnight, being first duly sworn, deposes and says that he is a member of the firm of McKnight and Comstock, One North LaSalle Street, Chicago 2, Illinois, attorneys of record in the above entitled application, and that a petition has been filed for making the application special.

Affiant states that he has made a careful and thorough search of the prior art and that he believes all of the claims in the above application are allowable.

Affiant also states that he will see to the best of his ability that the sworn statement is filed in compliance with the pledge by affiant S. R. Loughman, if the application is allowed.

[Executed Sept. 27, 1948, before Joyce Meyer, Notary Public, Cook County, Illinois.]

PATENT OFFICE
LETTER AND ENDORSEMENT

Oct. 1, 1948

Ex parte: C. M. Holloway
Serial No.: 484,407
Division: 65

The Examiner will please send the file of this application to Mr. C. W. Moore, Room 1859, indicating hereon when the application will be reached for action.

Lawrence C. Kingsland
Commissioner

This application will be acted upon ABOUT FEB. 15, 1949

Date 10/1/48 J. P. Wildman

PATENT OFFICE ACTION
PETITION DENIED

Oct. 11, 1948

Charles M. Holloway petitions that his above identified application be made special on the ground of prospective manufacture.

The supporting showing is satisfactory, but petitioner has concurrently requested that another application of his also be made special on the same ground. Since it is the practice not to make more than one application special for the same applicant at the same time on the ground recited, petitioner must elect between his two cases.

Pending such election, the present petition is denied.

Thomas F. Murphy,
Assistant Commissioner.

APPLICANT'S ELECTION

[Formal portions omitted]

Paper No. 4 Oct. 14, 1948

In response to the order entered herein on Oct. 11, 1948, applicant elects to have the above entitled application made special. Applicant therefore requests that the order be vacated and the petition herein granted.

PATENT OFFICE ACTION
PETITION GRANTED

Paper No. 5 Oct. 22, 1948

The renewed petition to make this case special has been considered.

If the examiner can make this case special without prejudice to any possible interfering applications, he is authorized to do so for the first action. Should the application be rejected, the case will not be considered special for the subsequent action unless the applicant promptly makes a bona fide effort to place the case in condition for allowance even if it is necessary to have an interview with the examiner to accomplish this purpose.

The petition is granted to the extent indicated.

Thomas F. Murphy
Assistant Commissioner

REJECTION

Paper No. 6 Oct. 29, 1948

This application has been examined.

The following references are cited:

Von Holtz	2,012,979	Sept. 3, 1935	173-339
Langdon	2,099,405	Nov. 16, 1937	173-339 x
Welch	2,277,468	Mar. 24, 1942	173-342 x
Smith	2,075,364	March 30, 1937	240-52.2 x

Claims 1 to 4 are in the application.

Claim 1 is rejected as aggregative. There is no special or peculiar cooperation between the details of the supporting flanges, on the one hand, and the details of the construction which permits a lamp guard to be attached to the socket, on the other hand. These features are mutually exclusive; each performs completely regardless of the presence or absence of the other.

Claim 1 is further rejected as unpatentable over Welch in view of Smith. The claim sets forth one continuous flange and a plurality of flanges spaced therefrom on the socket, a panel opening edge to be gripped in such space. The patent to Welch discloses a socket with a pair of flanges which operate in the same way, and wherein the continuous and smaller flange is deemed equivalent to the plurality of rear, front and side flanges claimed. In both instances, the socket is forced into the panel opening. To provide the forward end of the socket 19 of Welch with the guard receiving means of Smith, Figures 1 to 4, would not be invention.

Claims 2, 3, and 4 are rejected as finding the full equivalent in each of Welch and Langdon, wherein the spaced flanges function just as do the plurality of flanges in the instant case.

Claims 2, 3, and 4 are further rejected as substantially met in Von Holtz in view of Welch. To form the socket 25 of Von Holtz of soft rubber would not be invention. The several flanges 29 and 30 of Von Holtz are substantially the same as those claimed.

No claims are allowed.

F. P. McDermott
Examiner

J. W.

AMENDMENT

Paper No. 7 Dec. 16, 1948

In response to Office Action of October 29, 1948, applicant amends as follows:

[Adding Claims 5-7, which are Claims 1, 2 and 3, respectively, of Patent, without change.]

REMARKS:

Applicant has amended claims 1, 2 and 3, but for clarity and convenience these claims have been completely rewritten and are presented as new claims 5, 6 and 7 respectively. Claim 4 has been cancelled.

Applicant has carefully studied the references cited and remarks of the Examiner. It is believed that the claims as now presented are allowable over the references for the following reasons.

The objection as to aggregation has been overcome by eliminating from the claims any reference to the lamp guard.

The prior patent to Welch, 2,277,468, relates to a lampholder which requires a bracket and screw assembly to hold it on the wall of the refrigerator. The Welch

device is not mounted in an opening in the wall of the refrigerator cabinet and it does not provide or even suggest the provision of a moisture proof seal.

Welch shows a lampholder which requires two openings in the refrigerator panel. The wire leading to the socket passes through the larger opening and a fastening screw passes through the smaller opening. A bracket is held to the panel by the screw and the socket is mounted on the bracket. The socket of Welch is not forced into a panel opening or even mounted in a panel opening.

Welch does not teach applicant's new construction, in which there is a single opening in the wall of a refrigerator panel. Without the use of any brackets, screws or devices of any kind, or the use of any tools, applicant's socket is instantly mounted in a single opening in the refrigerator panel. Applicant's socket is so mounted that it is permanently installed and cannot be accidentally turned or removed, and at the same time it provides a moisture proof seal around the edges of the panel opening. The electrical wiring is all outside of the refrigerated compartment. Neither Welch nor any of the other references achieves these results.

The patent to Smith, No. 2,075,364 was cited to show the lamp guard, which has been cancelled from the claims.

The patent to Langdon, No. 2,099,405, shows a bracket device which is installed by the use of screws or other fastening means. The socket in Langdon is round and would easily rotate or turn within its opening upon the installation or removal of a light bulb. The construction of Langdon was not intended to have and did not in fact provide a moisture proof seal. The Langdon device requires a bracket which is held with a pair of screws

or other fastening means and the socket is mounted on the bracket. Langdon does not teach any of the features of applicant's invention.

The patent to Von Holtz, No. 2,012,979, shows a receptacle which is prevented from rattling by a pair of pins or plungers. His lugs 29 and shoulders 30 do not of themselves hold the socket in place. Each shoulder 30 carries a pin or plunger 32 which passes through an opening. A spring holds the pin projected through an opening in the lug 29. This construction is complicated mechanically and functions in an entirely different manner from that of applicant.

Applicant believes that the claims as now presented are patentable over each of the references or any combination thereof. Applicant's new and improved construction has not been taught or conceived by any of the prior inventors. Applicant is the first to provide a socket which is quickly installed without the use of brackets or tools in a single opening in a refrigerator panel and which cannot be accidentally turned and forms a moisture proof seal around the panel opening. The claims as now presented emphasize these features of applicant's invention.

Applicant has made an earnest effort to present the claims in allowable form so as to expedite the prosecution of the case. Applicant believes that the case is now in condition to be passed to publication. An early action to that end is requested.

Feb. 1, 1949. C. M. HOLLOWAY 2,460,636

SELF-SEALING ELECTRIC LIGHT SOCKET
FOR REFRIGERATOR PANELS
Filed Sept. 9, 1948

Fig 1

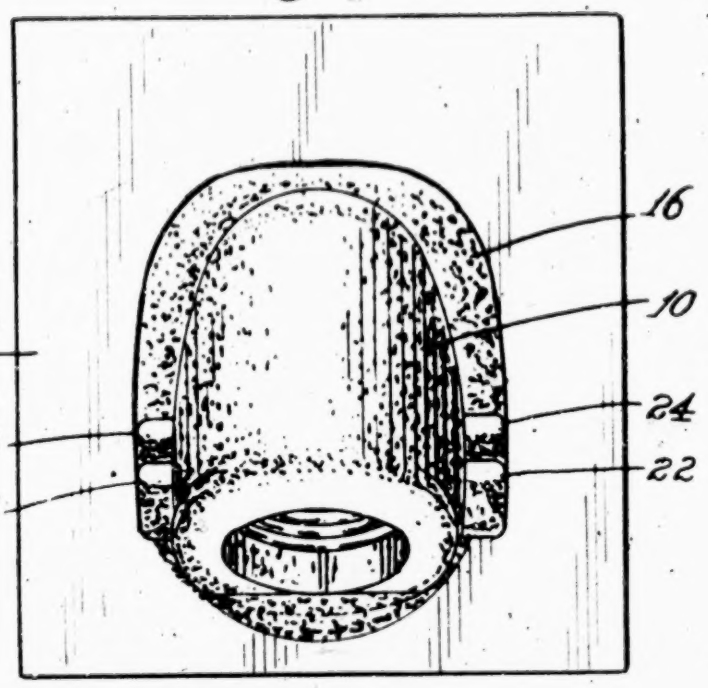

Fig 2.

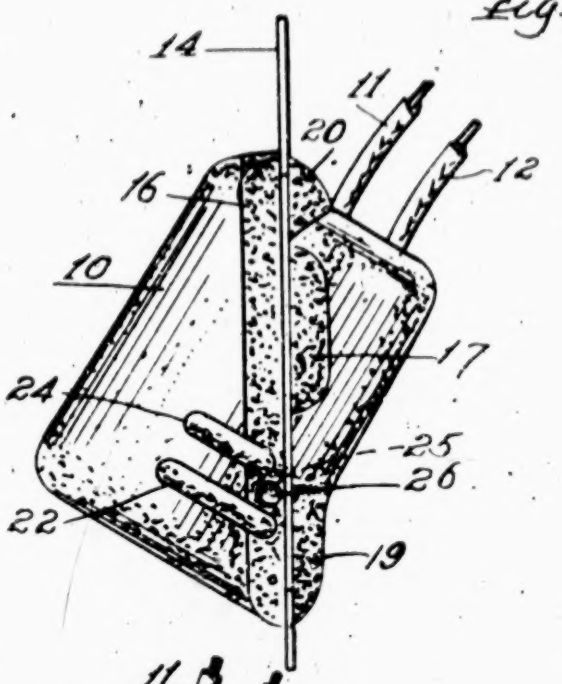

Fig 3

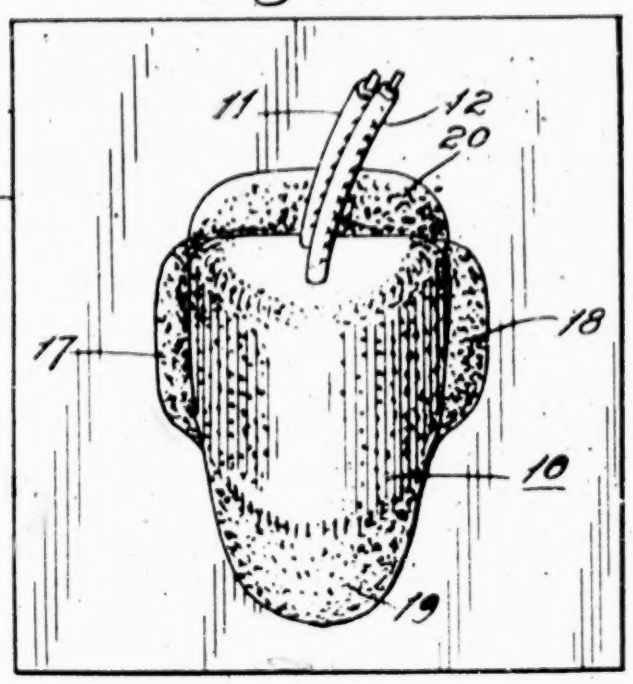

Fig 4

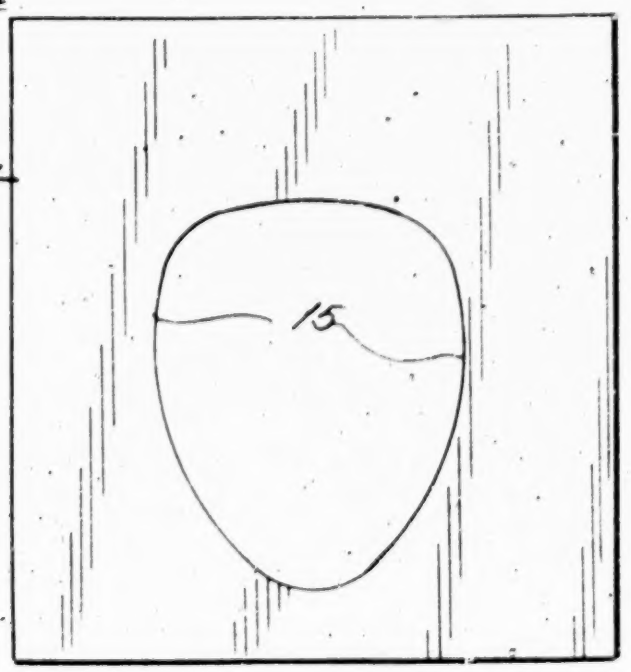

Fig 5.

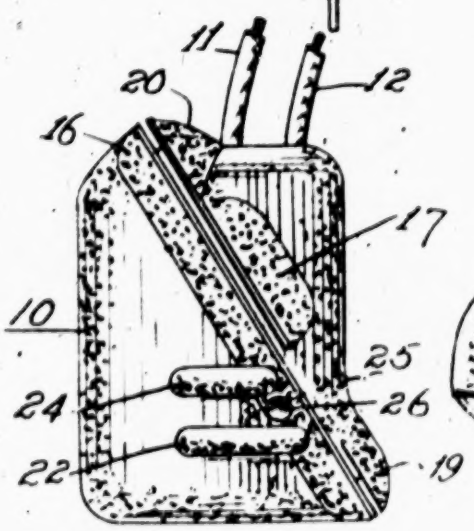

Fig 6

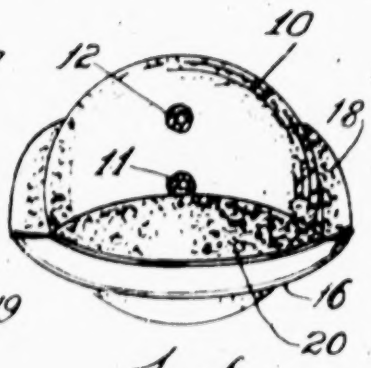

Fig 7

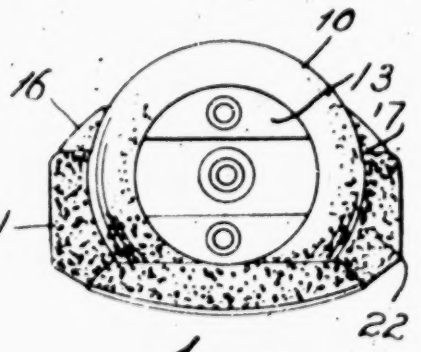

Fig 8

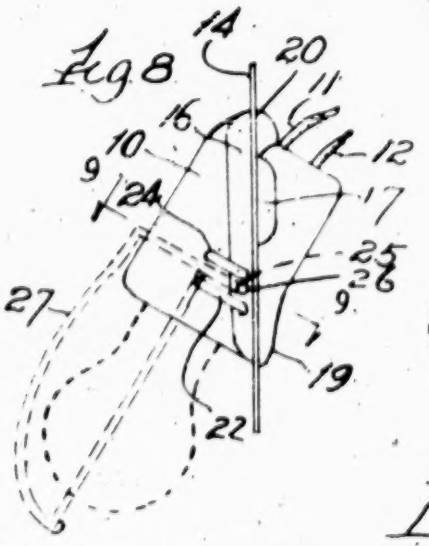

Fig 9.

Inventor
Charles M. Holloway
by McKnight and Comstock
Attorneys

Patented Feb. 1, 1949

2,460,636

UNITED STATES PATENT OFFICE

2,460,636

SELF-SEALING ELECTRIC LIGHT SOCKET FOR REFRIGERATOR PANELS

Charles M. Holloway, Chicago, Ill.

Application September 9, 1948, Serial No. 48,407

3 Claims. (Cl. 173—339)

1

This invention relates to an electric light socket for refrigerator panels, which is self-sealing upon installation.

Among the objects of my invention is to provide an electric light socket which is simple and economical to construct, install and use in a refrigerator panel, which is effectively sealed against moisture and which meets all electrical code safety requirements; to provide a socket which may be easily installed and removed by hand and which upon installation seals the socket opening to prevent turning, removal or the passage of moisture through the socket opening.

In the manufacture of home refrigerators, it has been found desirable to provide an electric light within the interior of the refrigerator, so that the contents of the refrigerator are easily visible. It is customary in the trade for an electrical manufacturer to assemble all of the component electric lighting parts of the refrigerator in a unit, which is referred to as a harness. The harness comprises the electric light socket, switch, wiring and any other desired parts. At the time the refrigerator is assembled, the harness is installed and the socket fitted into place in the refrigerator panel.

The refrigerator manufacturer provides an opening in the wall or panel of the refrigerator in which opening the socket is to be installed. It is among the objects of my invention to provide a socket for which the manufacturer need furnish only one opening in the panel, without any additional openings or fastening devices. My socket, with the electrical wires already installed, may easily be snapped into place in a matter of seconds. It is completely self-sealing, sealing itself against movement and sealing the socket opening against the passage of moisture from the refrigerated compartment.

A further object of my invention is to provide such a socket which meets the standards of electrical safety, which require that the socket be capable of withstanding a minimum of 20 in. lbs. of torque and a minimum of 20 lbs. of pull-out pressure. This minimum strength is necessary in order to avoid damage to the socket when light bulbs are installed in or removed from the socket.

A further object of my invention is to provide such a socket having means integral with the socket itself for holding a light guard to prevent the bulb from being accidentally broken. My invention also provides a light installation which requires a minimum of space between the refrigerator wall and freezer compartment

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and which is modern and attractive in appearance.

A further object of my invention is to provide a socket which may be easily removed from the refrigerator panel for repair or inspection of the socket or wiring and then easily replaced after repair.

My invention also comprises such other objects, advantages and capabilities as will later more fully appear and which are inherently possessed by my invention.

While I have shown in the accompanying drawings a preferred embodiment of my invention, yet it should be understood that the same is susceptible of modification and change without departing from the spirit of my invention.

Referring to the drawings, Fig. 1 is a front elevational view of my socket installed in the refrigerator panel; Fig. 2 is a side elevational view of the same; Fig. 3 is a rear elevational view of the same; Fig. 4 is a front view of the refrigerator panel and socket opening; Fig. 5 is a side elevational view of my socket; Fig. 6 is a top plan view of the same; Fig. 7 is a bottom plan view of the same; Fig. 8 is a side elevational view of my socket installed in a refrigerator panel with a light bulb and lamp guard shown installed in dotted lines and Fig. 9 is an end elevational view of a lamp guard in dotted lines on line 9—9 of Fig. 8.

A preferred embodiment selected to illustrate my invention comprises a body member 10, which is preferably formed of molded rubber. The material used in body member 10 must be sufficiently soft and flexible to permit movement in the manner hereinafter described. Extending outwardly from the base of body member 10 are a pair of electrical wires 11 and 12, which provide electric current to the socket. Body member 10 has a hollow interior with a front opening. Within its interior is mounted a screw-threaded shell base 13, which is adapted to receive the base of an electric light bulb. Shell base 13 is connected to electric wires 11 and 12 to operate a light bulb.

My socket is adapted to be installed in a refrigerator panel 14, which is provided with a single egg-shaped socket opening 15. It is customary to place opening 15 in the panel which forms the back wall of the refrigerator, directly behind and at the lower edge of the freezer section.

Body member 10 is provided at its exterior with an outwardly projecting integral upper flange 16, which extends obliquely along each side of body

member 10 and along the lower front and the top rear of body member 10.

On both sides of body member 10 adjacent its base and extending obliquely forward and downward are integral side flanges 17 and 18, which extend outwardly from body member 10. Side flanges 17 and 18 are spaced slightly from upper flange 16 to provide a groove between side flanges 17 and 18 and upper flange 16. Side flanges 17 and 18 extend for approximately one-half of the length of body member 10.

On the front of body member 10, directly beneath the front opening is an integral front flange 19, which is spaced slightly from upper flange 16 to form a groove therebetween. Front flange 19 extends outwardly from body member 10 for approximately one-half of the distance that upper flange 16 extends.

On the rear of body member 10 is an integral rear flange 20, which extends outwardly from body member 10 and is spaced slightly from upper flange 16 to form a groove therebetween. Rear flange 20 terminates adjacent the ends of side flanges 17 and 18.

On each side of body member 10 near the front opening are integral lamp guard receiving members which extend outwardly from body member 10. The lamp guard receiving members comprise front members 21 and 22 and rear members 23 and 24. Front members 21 and 22 extend in a straight line from adjacent the edge of upper flange 16 parallel to the front opening in body member 10. Rear members 23 and 24 extend in a straight line parallel to front members 21 and 22 respectively and are spaced slightly therefrom.

Between the ends of the front and rear members which overlap upper flange 16 are openings 25 and 26, which are small holes extending into body member 10 and which are adapted to receive and hold the ends of a lamp guard 27.

Lamp guard 27 comprises a circular member which is adapted to encircle the portion of body member 10 which projects above panel 14, with its ends bent at right angles to penetrate into openings 25 and 26. The remainder of lamp guard 27 comprises a plurality of wires formed in any desired manner to guard whatever type light bulb is used in my socket.

In operation, my socket is formed of fairly soft molded rubber, with the flanges and lamp guards integral with and projecting outwardly from the body member. Electric wires 11 and 12 are connected to screw-threaded shell base 13 and the entire harness assembly is installed in the refrigerator so that my socket is positioned directly beneath socket opening 15 in refrigerator panel 14, ready for installation.

Body member 10 is pulled upwardly through the larger end of socket opening 15. It is then pushed rearwardly until the rear edge of socket opening 15 is held between upper flange 16 and rear flange 20. Body member 10 is then twisted until the side edges of socket opening 15 are held between upper flange 16 and side flange 17 and 18. The front of body member 10 is then pushed downwardly until front flange 19 snaps under panel 14, so that the front edge of socket opening 15 is held between upper flange 16 and front flange 19.

This installation can be made by a trained worker in less than three seconds, without the use of any tools or equipment. Once my socket is installed, upper flange 16 grips the entire edge of socket opening 15 and is held tightly flat against the face of refrigerator panel 14. This provides a seal which prevents any moisture from passing through socket opening 15.

In the event that trouble occurs in the lighting circuit, my socket may be easily removed for inspection or repair of the socket or wiring and easily replaced after repair. A light bulb placed in my socket projects downwardly at an angle so as to give a modern appearance, without any extraneous bolts or fastening devices. It is particularly adapted to be used behind the freezer section of a refrigerator, where it requires a minimum of space.

Having thus described my invention, I claim:

1. An electric light socket for refrigerator panels comprising an outer molded rubber housing having a hollow interior with a front opening adapted to receive an electric light bulb, a screw-threaded shell base mounted within the interior of said rubber housing, a pair of electrical wires extending through the base of said rubber housing for connecting said shell base to a suitable source of electrical supply, an upper flange integral with said rubber housing and extending outwardly from and diagonally around the entire outer surface of said rubber housing separating said front opening from said pair of electrical wires, a rear flange integral with said rubber housing and extending outwardly therefrom adjacent the base of said rubber housing, said rear flange positioned directly beneath said upper flange and spaced slightly therefrom on a corresponding diagonal line, a front flange integral with said rubber housing and extending outwardly therefrom adjacent the front opening of said rubber housing, said front flange positioned directly beneath said upper flange and spaced slightly therefrom on a corresponding diagonal line, a side flange integral with said rubber housing and extending outwardly therefrom on each of the opposite sides of said rubber housing, said side flanges positioned directly beneath said upper flange and spaced slightly therefrom in a corresponding diagonal line, said socket adapted to be installed by hand without the use of tools in a single irregular opening in a refrigerator panel of a refrigeration chamber corresponding in shape to the shape of the said housing between said diagonal flanges, so that said flanges grip the edges of the opening and hold the edges in the space between said upper flange and said front, rear and side flanges so that said socket may not be accidentally turned or removed and said upper flange contacts the face of the refrigerator panel around the entire circumference of the opening to provide a moisture proof seal around said opening, with said front opening positioned in front of the refrigerator panel for insertion of an electric light bulb and said pair of electrical wires positioned behind the refrigerator panel for electrical connection outside of the refrigeration chamber.

2. An electric light socket for refrigerator panels comprising an outer molded rubber housing having a hollow interior with a front opening adapted to receive an electric light bulb, a pair of electrical wires extending from said housing for connecting said socket to a suitable source of electrical supply, an upper flange integral with said rubber housing extending around the outside of said rubber housing to form an oval separating said front opening from said pair of electrical wires, four flanges integral with said rubber housing extending outwardly therefrom

Dec. 14, 1937. F. C. KOLLATH Re. 20,585

ELECTRIC SOCKET AND CASING

Original Filed March 17, 1930

Fig 1.

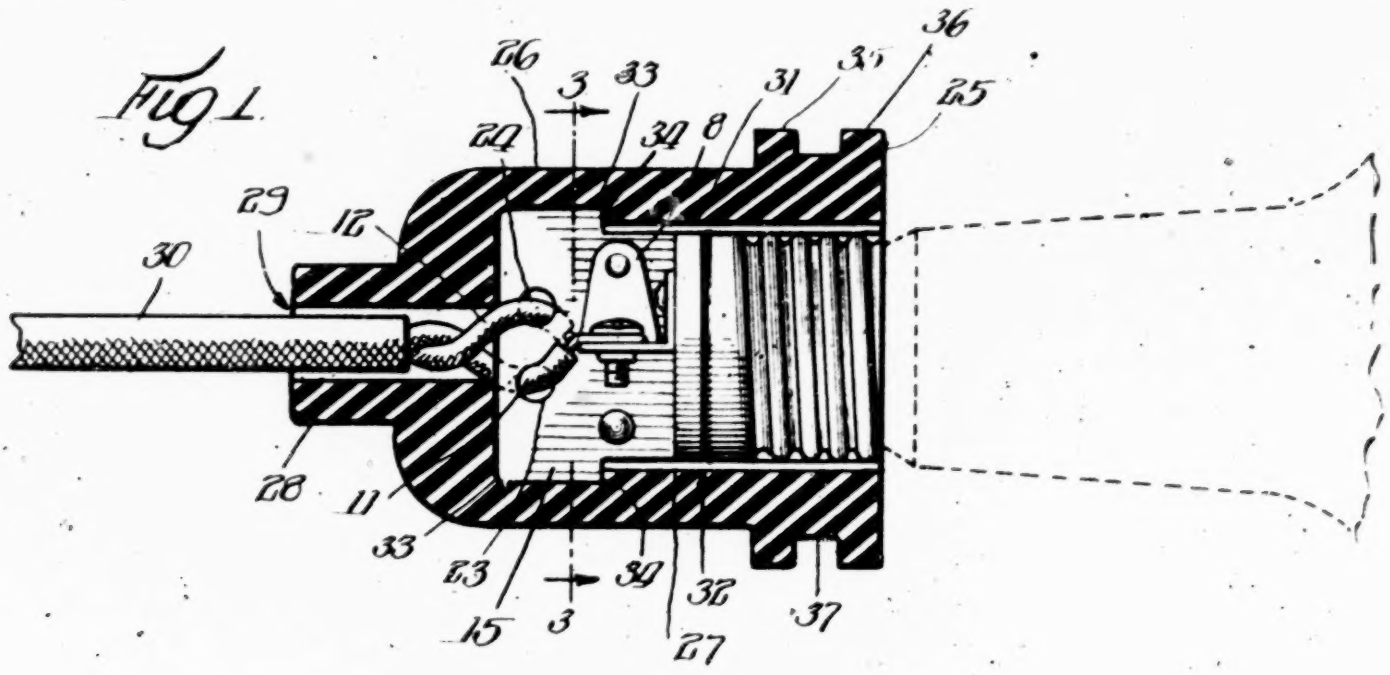


Fig 2.

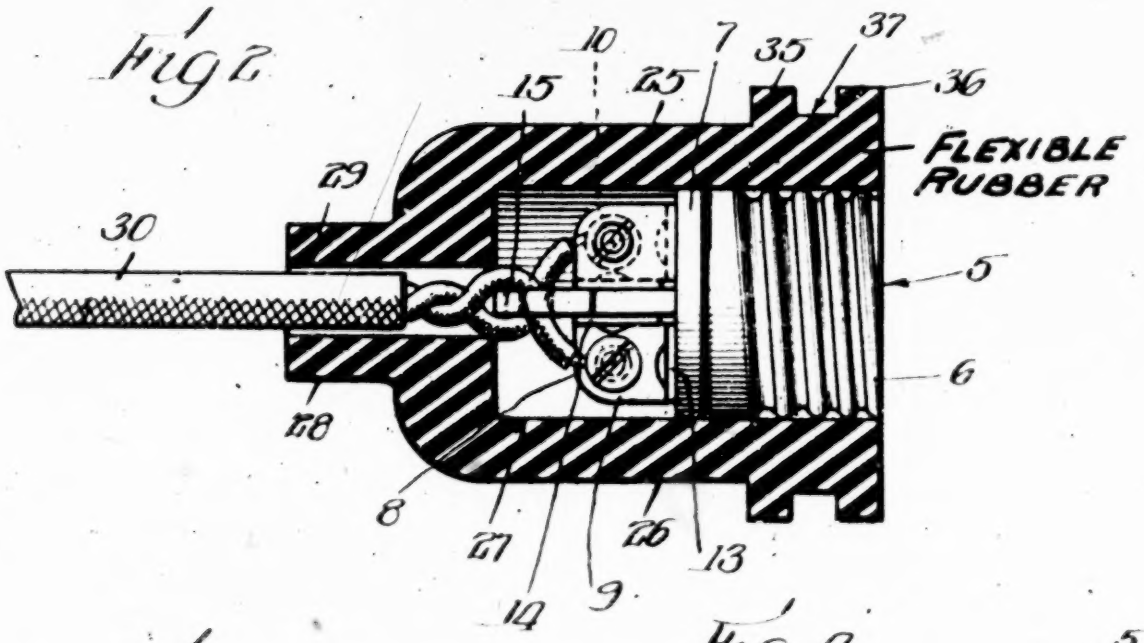


Fig 3.

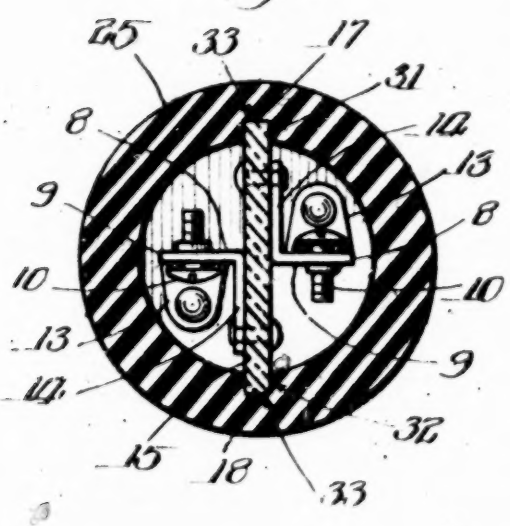
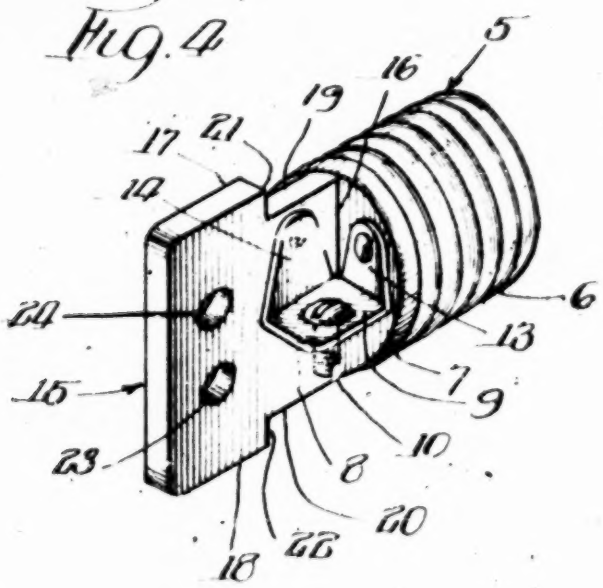


Fig 4.



Inventor.
Francis C. Kollath,
By Cheever, Cox & Moon
Attys

Reissued Dec. 14, 1937

Re. 20,585

UNITED STATES PATENT OFFICE

20,585

ELECTRIC SOCKET AND CASING

Francis C. Kollath, Chicago, Ill., assignor of one-half to Daniel Woodhead, Evanston, Ill.

Original No. 2,018,134, dated October 22, 1935, Serial No. 436,289, March 17, 1930. Application for reissue May 8, 1936, Serial No. 78,725

11 Claims. (Cl. 173—358)

This invention relates to an electric socket and particularly to an electric socket provided with means which interfittingly engage a socket guard or casing.

The primary object of the invention is to provide a socket which has new and novel means for connecting a strain relief member thereto, and which has new and improved terminals arranged thereon.

Another object is to provide a new and improved socket which is provided with means for interfittingly engaging a socket guard or casing.

A further object is to provide a casing of improved construction which is provided with means for interfittingly receiving a strain relief member on a socket.

A still further object is to provide an improved strain relief member which is secured to the body of a socket by elements which act as contactors or terminals.

It is an additional object of the present invention to provide a new and improved type of rubber encased electrical connector in which the contactor elements will not twist loose in the casing during use.

Numerous other objects and advantages will be apparent throughout the progress of the following specification.

The invention comprises in general a socket member having a relatively flat member which is made of insulating material and which is connected to the body of the socket by the terminals to which electrical contact is made with the socket. The member is provided with outwardly extending projections which are received in grooves in a flexible rubber guard or casing. The projections on the member provide shoulders which engage shoulders inside of the rubber guard or casing.

The accompanying drawing illustrates a selected embodiment of the invention and the views therein are as follows:

Fig. 1 is a detail elevation showing the improved socket arranged in its cooperating guard or casing and showing conductors electrically connected thereto

Fig. 2 is a similar view at right angles to the view shown in Fig. 1.

Fig. 3 is a detail sectional view on the line 3—3 of Fig. 1.

Fig. 4 is a detail perspective view of the improved socket and member.

Referring to the drawing, 5 designates generally a socket member having the usual screw threaded shell 6. This shell is rigidly connected to an insulated disk 7 to which a pair of terminals 8, 8 are attached and which are elctrically connected with the socket in the usual manner. These terminals 8 each comprise a main body portion 9 into which a screw member 10 threadedly engages for securing the conductors 11 and 12 to the terminals. A base portion 13 which is integral with the body 9 is bent over from the body portion and is rigidly connected to the disk 7. A wing portion 14 which is integral with the body portion 9 is bent at right angles to the body portion and is rigidly connected to the member 15. Each terminal 8 therefore comprises a portion which is attached to the socket member, a portion which is attached to the member 15, and a body portion to which an electrical connection is made with a conductor.

The member 15 is made of insulating material and comprises a base portion 16 which is adapted to rest against the outer face of the disk 7. This member 15 is fastened to the socket by means of the terminals 8 which were previously described. Projections 17 and 18 extend from the sides 19 and 20 respectively of the member 15 and provide shoulders 21 and 22. Holes 23 and 24 may be provided in the member to receive the conductors 11 and 12 respectively. The conductors straddle the member 15, the conductor 12 passing over one side of the member 15, through the hole 24 and then connected to a terminal 8 on one side of the member 15, while the conductor 11 passes over the other side of the member 15, through the hole 23 and connected to the terminal 8 on the side opposite to which the conductor 12 is connected to its cooperating terminal 8.

The socket together with the member 15 is adapted to be inserted within a flexible rubber casing or guard 25. This guard 25 has an enlarged portion 26 having an enlarged recess 27 and a portion 28 which is provided with a passage 29 which communicates with the recess 27. The socket 5 is adapted to be received in the recess 27 and the conductors 11 and 12 which are encased in a single sheath 30, extend through the passage 29 and make electrical connection with the contacts after the conductors pass through the holes 23 and 24. By passing the conductors through the holes on opposite sides as previously set forth, any strain applied on the cable 30 will not be transmitted to the terminals but will be taken up by the member 15 where the conductors pass through the holes 23 and 24.

The casing or guard 25 is provided with oppositely aligned longitudinal slots or grooves 31 and 32. These slots or grooves are deepened or en-

larged at 33 to provide shoulders 34. These shoulders are adapted to engage the shoulders 21 and 22 on the member 15 to prevent the socket from falling out of the casing or guard. The casing or guard is preferably made of flexible rubber which expands or flexes sufficiently to permit the projections 17 and 18 on the member 15 to be slid through the slots or grooves 31 and 32. When the socket is finally inserted in position, the projections 17 and 18 will engage the sides of the slots or grooves where they are deepened as indicated at 33. The flexibility of the casing permits it to spring back to normal position and engage or hug the sides of the member 15 as clearly shown in Figs. 1 and 2. The shoulders 21 and 22 on the member 15 engage the shoulders 34 in the casing to prevent the socket from being withdrawn accidentally from the casing, but the flexibility of the rubber permits the socket to be withdrawn from the casing if and when it is desired to remove it. The guard 25 may also be provided with exterior annular flanges 35 and 36 to provide an annular groove 37 into which the clamping ring of a shade or lamp guard (not shown) may be received. The flat member 15 engaging the grooves in the casing prevents the socket or any of its parts from turning in the casing even when a lamp or plug is screwed in the socket.

The invention provides a socket which is comparatively simple in construction and which may be readily and economically manufactured. The member 15 not only acts as a strain relief to take up any strain which may be exerted on the conductors, but it also assists in holding the socket member in its cooperating casing. The casing is provided with a groove into which the member 15 may be slid, and the cooperating shoulders on the casing and the shoulders on the member 15 securely hold the socket in position and prevent the shell from accidental movement in the assembly. This member of course may be positioned variously with respect to the body of the shell. The terminals are preferably made in one piece from a sheet of brass material. The terminals not only provide means for making an electrical connection between the conductors and the socket, but also perform the function of holding the member 15 and the socket together.

Changes may be made in the form, construction, and arrangement of the parts without departing from the spirit of the invention or sacrificing any of its advantages, and the right is hereby reserved to make all such changes as fairly fall within the scope of the following claims.

The invention is hereby claimed as follows:

1. In combination, a flexible rubber open-ended casing having alined grooves extending from the margin of the opening, said grooves merging with deeper grooves and providing shoulders, a flat base in said casing and engaging said grooves, said base having projections received in said deeper grooves, said projections providing shoulders engaging the first shoulders and holding the base in position.

2. In combination a flexible rubber open-ended casing having alined grooves extending from the margin of the opening, said grooves merging with deeper grooves and providing shoulders, a flat base in said casing and engaging said grooves, said base having projections received in said deeper grooves, said projections providing shoulders engaging the first shoulders and holding the base in position, contacts fastened to each side of the base and electric terminals connected to said contacts.

3. A connector comprising a flexible casing made of flexible rubber-like material, a shell of a predetermined diameter arranged in the casing, a flat base connected to the shell, a part of said base being of a width greater than the diameter of the shell and forming shoulders, said casing having grooves therein forming shoulders and being stretchable within limits for holding the base in position in the casing, the shoulders of the base locking with the shoulders of the casing.

4. A connector comprising a shell of a predetermined diameter, a flat base connected to the shell, a part of said base being of a greater width than the diameter of the shell, a flexible rubber casing receiving the connector, and shoulders on the inside of the casing and engaging the said part of the base for holding the connector in place inside of the casing, said casing having aligned grooves therein to receive the said part of said base.

5. A connector comprising a shell of a predetermined diameter, a flat base connected to the shell, a part of said base being of a greater width than the diameter of the shell, a flexible rubber casing receiving the connector, and shoulders on the inside of the casing and engaging the said part of the base for holding the connector in place inside of the casing, said casing having aligned grooves therein to receive the said part of said base, said grooves forming said shoulders which engage the said part of said base.

6. An electric connector comprising a soft flexible casing made of rubber-like material and having an opening therein, said casing having opposite grooves in its inner wall extending from the margin of the opening and having shoulders intermediate their lengths, a base arranged in said casing and having extensions extending into the grooves, the extensions forming shoulders engaging the first named shoulders for locking the base in the casing, and electric connector means fastened to the base, said casing being stretchable within certain limits to permit insertion or removal of said base.

7. An electric connector comprising a base, a disk connected to the base, a shell engaging the disk, a contact member perpendicular to the disk, an integral base portion bent from the contact and fastened to the disk, and a wing bent from a side of the contact member and fastened to the base.

8. A connector comprising a casing having an opening therein, a disk arranged in the opening of the casing, a base plate connected to and extending substantially normal to the disk, said base plate and casing having interfitting means to secure the base plate to the casing, and terminals secured to said base plate and disk.

9. A connector comprising a casing having an opening therein, a disk arranged in the opening of the casing, a base plate connected to and extending substantially normal to the disk, said base plate and casing having interfitting means to secure the base plate to the casing, and terminal means connected to said base plate and to the disk to relatively brace the disk and base plate.

10. In an article of the class described, an electrical lamp socket having a generally cylindrical configuration, a flexible open-ended rubber casing having an internal substantially cylindrical space formed therein to accommodate and support the socket, a groove formed on the interior side wall of the casing and extending in a direction parallel to the axis of said cylindrical socket, a guide groove extending longitudinally

on the front, rear and two sides of said rubber housing and spaced slightly from said upper flange on a corresponding line, said socket adapted to be installed without the use of tools in a single oval-shaped opening in a refrigerator panel corresponding in shape to the oval formed between said flanges, so that said flanges grip the edges of the opening and hold the edges in the space between said upper flange and said front, rear and side flanges, so that said socket may not be accidentally turned and said upper flange contacts the face of the refrigerator panel around the entire circumference of the opening to provide a moisture proof seal around said opening, with said front opening positioned on one side of the refrigerator panel for insertion of an electric light bulb and said pair of electrical wires positioned on the other side of said refrigerator panel for electrical connection.

3. An electric light socket for refrigerator panels comprising an outer flexible housing having a hollow interior with a front opening adapted to receive an electric light bulb, means for connecting said socket to a suitable source of electrical supply, a continuous flange extending around the outside of said housing to form a non-circular shape, a plurality of shorter

flanges extending partially around the outside of said housing and spaced slightly from said continuous flange on a corresponding line, said socket adapted to be installed without the use of tools in a single non-circular opening in a refrigerator panel corresponding in shape to the shape of said housing between said flanges, so that said flanges grip the edges of the opening and hold the edges in the space between said continuous flange and said shorter flanges, so that said socket may not be accidentally turned and said continuous flange contacts the face of the refrigerator panel around the entire circumference of the opening to provide a moisture proof seal around said opening.

CHARLES M. HOLLOWAY.

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Number	Name	Date
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2,099,405	Langdon	Nov. 16, 1937
2,277,468	Welch	Mar. 24, 1942

Nov. 16, 1937. J. D. LANGDON 2,099,405

RESILIENT LIGHT SOCKET AND BRACKET EXTENSION

Filed Feb. 15, 1937

Fig. 1.

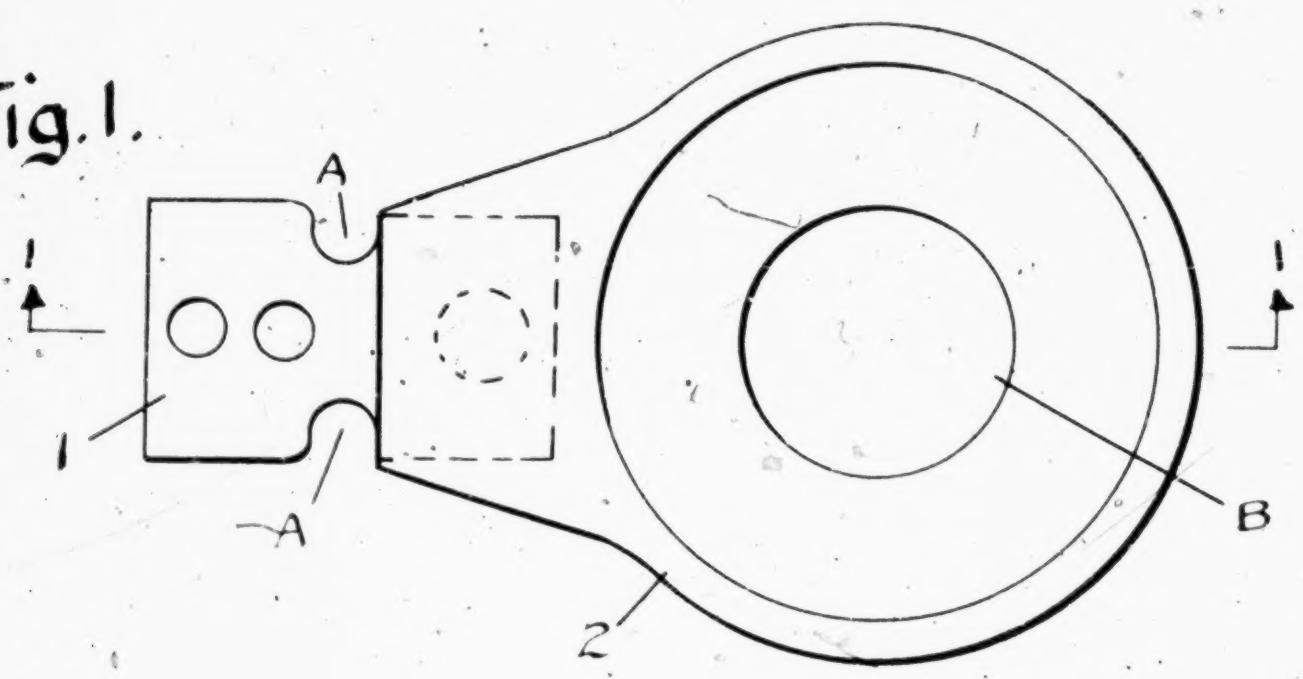


Fig. 2.

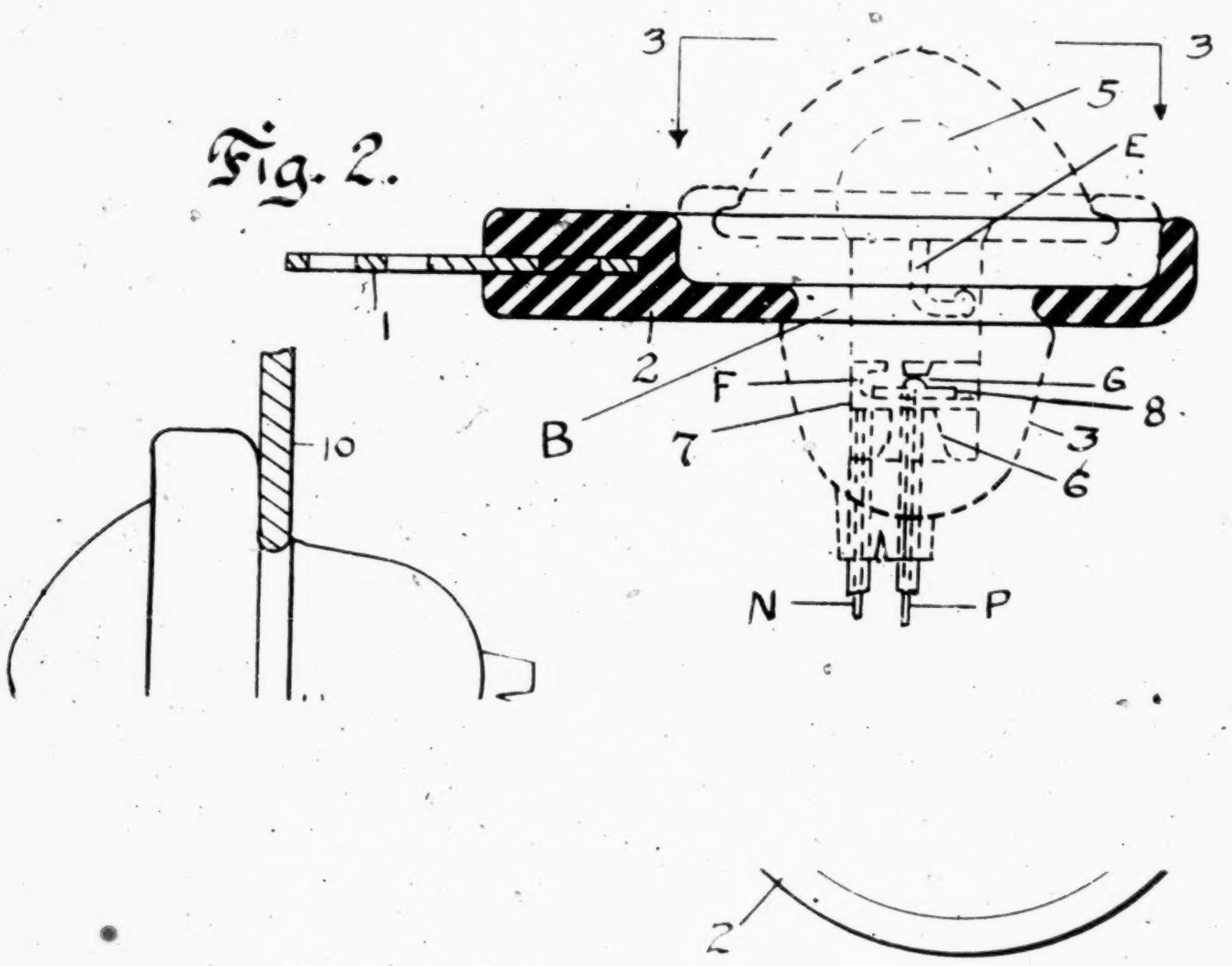


Fig. 2.

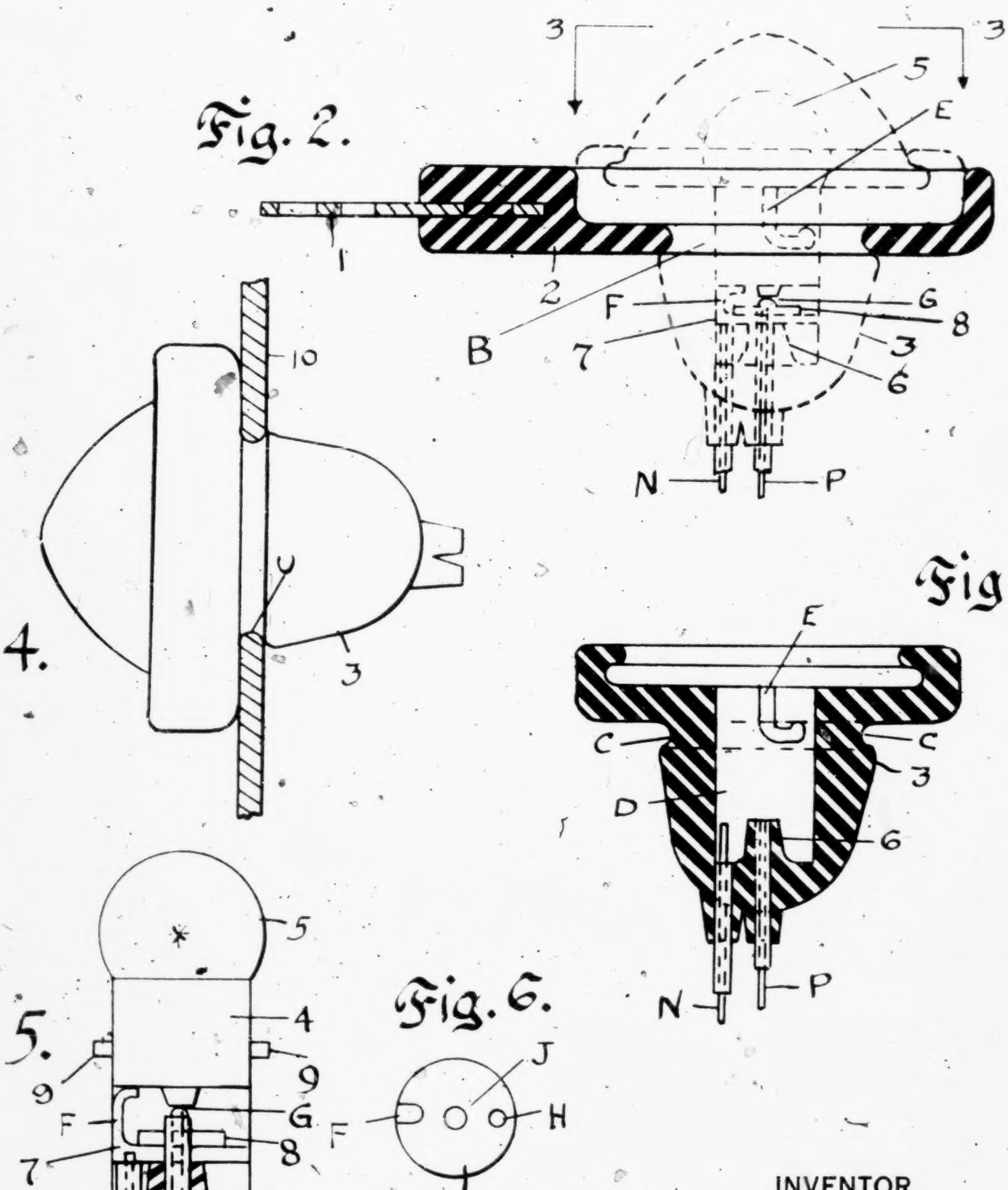


Fig. 4.

Fig. 3.

Fig. 5.

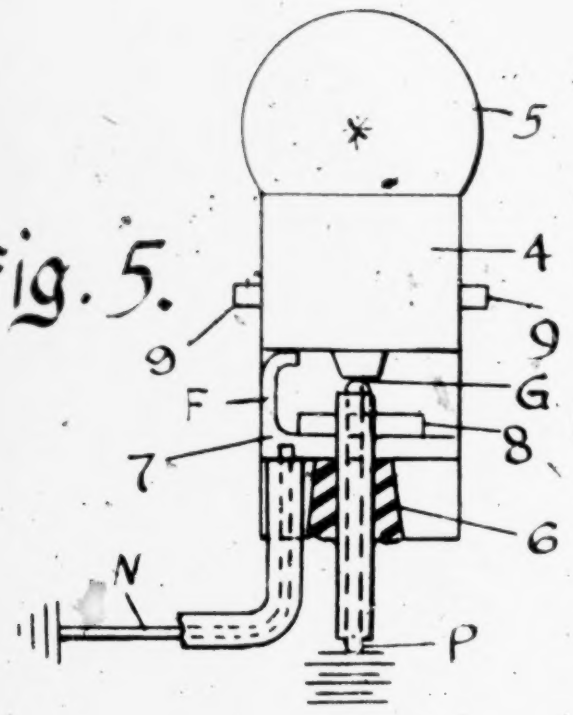
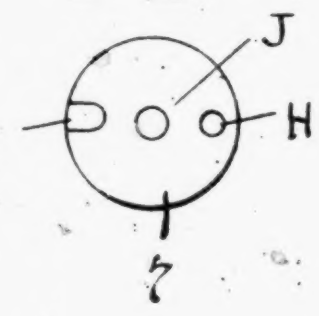


Fig. 6.



INVENTOR

BY J. D. Langdon

ATTORNEY

Patented Nov. 16, 1937

2,099,405

UNITED STATES PATENT OFFICE

2,099,405

RESILIENT LIGHT SOCKET AND BRACKET EXTENSION

Jesse D. Langdon, Los Angeles, Calif., assignor of two-thirds to George J. Kilgen and Edward W. Todd, both of Los Angeles, Calif.

Application February 15, 1937, Serial No. 125,728

5 Claims. (Cl. 173—358)

My invention relates to improvements in light sockets made of resilient material adapted to deform for mounting in bracket extensions or various bodies having suitable apertures therethru to receive and retain a light socket, also to suitable bracket extension design for use with said light socket.

The primary object in my invention is to provide a light socket of resilient material capable of being forced into an aperture to retain the light socket in operative position.

Another object in my invention is to provide a light socket made entirely of resilient material capable of receiving and retaining an electric light globe without the necessity of using a metal socket.

Another object is to provide an electric light socket which can be molded of a single piece of resilient material, providing in combination a resilient internal extension lug to take the place of a spring to support circuit completing connections against a light globe shank, light globe receiving grooves to take the place of a metal socket, together with a lens retaining bezel, all molded in an integral unit.

Another object is to provide suitable electrical circuit connections in combination with a resilient light socket molded of a single piece of rubber without the necessity of using a metal socket.

A further object in my invention is to provide a flexible bracket extension of suitable form to receive a rubber light socket and securely retain the same for a swinging suspension, said extension separable from said resilient socket.

A still further object in my invention is to provide a light socket and a flexible bracket extension suitable for combined or separate use, and to facilitate replacement of parts.

Other and further objects will appear as the description proceeds as set forth in the specification and illustrated by the drawing, of which,

Fig. 1 is a plan view of the flexible bracket extension.

Fig. 2 is a longitudinal section of the flexible bracket extension with the position of the lens, socket and light shown in dotted lines.

Fig. 3 is a sectional view of the rubber light socket molded of a single piece of material.

Fig. 4 illustrates the resilient light socket disposed through a fragmentary section of material.

Fig. 5 is an enlarged view of an electric light globe with a metal contact washer supporting an insulated contact washer held in contacting position by a fragmentary portion of the light socket extension lug.

Fig. 6 is a plan view of the metal contact washer.

The drawing is for the purpose of illustration only, and I do not confine myself to the exact showing thereof, except as I may be limited by the claims. It is evident that the form of my invention may be changed to suit the contingencies of use within the scope of the claims.

Fig. 1 represents a bracket extension having a metal attaching bracket 1 formed with notches A provided to permit easy bending or twisting in any direction necessary to meet the contingencies of use. The metal attaching bracket 1 extends into and is molded integral with a flexible extended portion 2 said portion 2 having an aperture B disposed therethrough suitably formed to receive a resilient electric light socket 3 and hold the same in the position illustrated in dotted lines as of Fig. 2.

Fig. 3 shows a section view of the resilient socket at 3—3 having a narrow neck portion C formed by a shallow external groove surrounding the external circumference of the resilient socket 3 adapted to be impinged by the material surrounding the aperture B of the flexible extended portion 2. A recess D is extended into the socket 3 to receive the shank 4 of electric light globe 5. An internal extension lug 6 is provided to support a ground wire contact 7 and live wire contact and insulation washer 8 against the shank 4 of globe 5 to establish an electric circuit. The pins 9 of shank 4 are adapted to enter grooves E two of which are molded opposite to one another disposed into the wall of recess D.

Fig. 4 illustrates the socket 3 after having been forced through a hole previously made of suitable size to receive said socket, which may thus be installed through any suitable material of the body to which the socket is to be attached.

The method of attaching or installing the light socket 3 independent of the bracket 2 consists of boring a hole through the material 10 approximately the same size as the neck portion C then forcing the bulbous end of resilient socket 3 through the hole. This eliminates the need of screws, bolts or any of the usual attaching means for other types of light sockets.

It will be seen that the resilient socket 3 is capable of being distorted sufficiently by pressure in such a manner to allow the socket 3 to be forced through a hole in the material 10. After being forced through the hole in the material 10 the bulbous portion of the socket 3

120a

resumes its normal form holding itself in position as illustrated.

For use with the bracket extension 2, the bulbous portion of the socket 3 is forced through the aperture B, said extension 2 being preferably made of resilient material tends to exert a tension around the neck C of resilient socket 3. Thus it will be seen that by combining extension 2 and socket 3 to form a flexibly mounted resilient socket, a unit will be provided capable of being swung from any suitable object.

The notches A as of Fig. 1 reduce the breadth of the material of the metal bracket 1, providing a comparatively narrow section of metal which may be readily bent or twisted to any convenient angle or position necessary for installation or attachment.

Fig. 5, illustrating the light globe 5 having a shank 4 disposed against a metal washer 7 having a contact ear F, provides the means of establishing an electrical circuit which is completed by the contact point G extending through the insulating washer 8 surrounding and insulating the positive connection P. Thus the ear F and the contact point G are the means of completing an electrical circuit. The supporting lug 6 surrounds the positive connection C supports the metal washer 7 in contact with the shank 4 of globe 5. The insulating washer 8 is in turn supported by the metal washer 7.

Fig. 6 is a plan view of the metal washer 7, which has a hole H perforated therethrough to receive the negative or ground wire N, while the hole J permits the passage of wire P. The hole H may be perforated in any desired position.

Due to the fact that the bracket extension 2 is separate from the resilient socket 3, it is practical and convenient to have several molds adapted to make the extension 2 in various lengths. It will take a comparatively cheap mold to build the extension 2, while another set of molds can be used for the socket 3 for use with any of the various extensions made. Thus it will be seen that this arrangement greatly decreases the equipment cost as compared with that which would be necessary if bracket extensions of various lengths were molded integral with a light socket.

It will also be seen that due to the fact that the bracket extension 2 and the socket 3 are molded separately, the public will have the opportunity of purchasing a device adapted to different methods of installation when desired. For example, the socket may be hung with a flexible extension or may be inserted into any body where it is desired to use the same in the manner set forth, as of Fig. 4.

Further, a considerable saving is achieved in production costs due to the fact that the grooves E are molded integral within the socket 3 and the lug 6 takes the place of a spring to support the circuit completing connections 7—F and 8 in making contact G, saving cost of metal socket and spring.

Having described my invention and that which is new, I claim:

1. A resilient electric light socket, including means molded integral with said socket and of the same material as said socket to retain the shank of an electric light globe, and additional means molded integral with and extended into the recess of said socket to support electric circuit completing contacts against the shank of said electric light globe.

2. The combination of an electric light socket formed of a unitary piece of rubber-like material to receive the shank of an electric light globe and having an integral inwardly extending boss resilient enough to support and maintain contact between circuit completing connections disposed within said socket, and elements combined with said socket to hold the shank of said globe and said circuit completing connections in assembled relationship within said socket.

3. An electric lamp socket comprising a structure composed of rubber-like material resilient enough to resume its normal shape after being deformed, said socket formed with an annular wall having a bulbous external contour adapted to be compressed and deformed for insertion through an annulus, said socket portion adapted to be held in said annulus by the expanded contour of said bulbous portion.

4. A device as of claim 2, the circuit completing connections comprising a central contact member insulated from and disposed through a metallic contact member, both members adapted to contact the shank of the electric light globe to complete the circuit.

5. For use with a device of the class described, a double contact comprising an insulated central contact element disposed through a metallic washer having an upstanding contact terminus, both elements adapted to simultaneously contact the shank of an electric light globe.

JESSE D. LANGDON.

March 24, 1942. R. C. WELCH 2,277,468

LAMPHOLDER ASSEMBLY

Filed Jan. 4, 1940

Fig. 1.

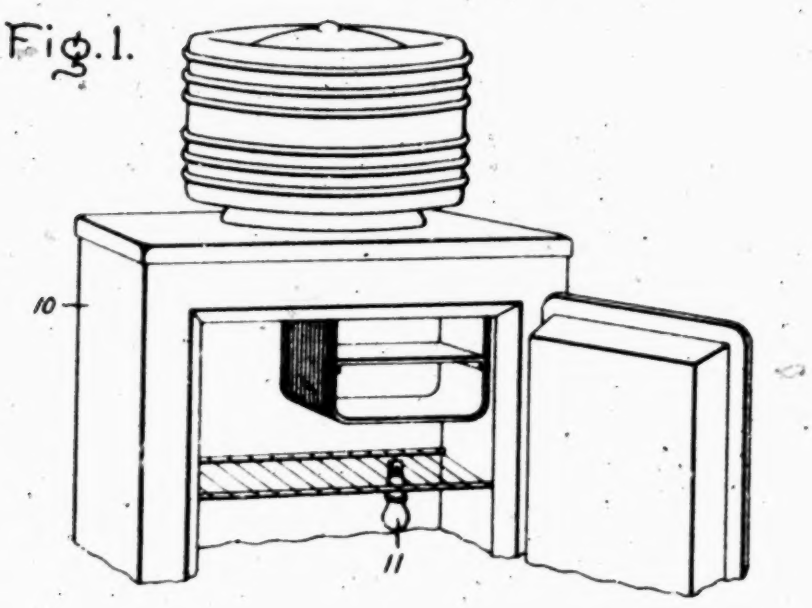


Fig. 2.

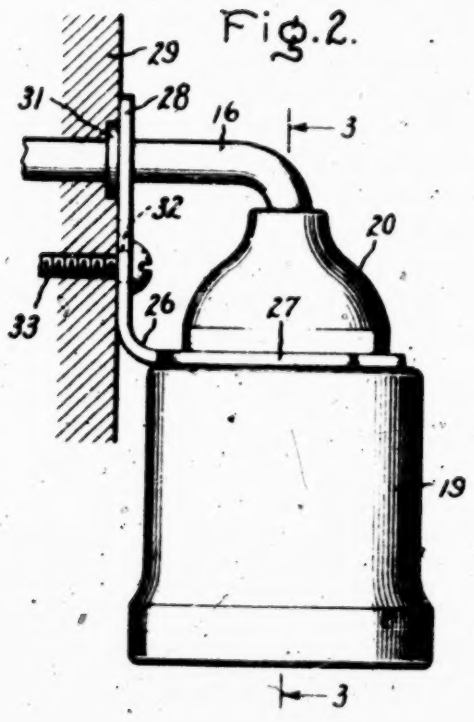
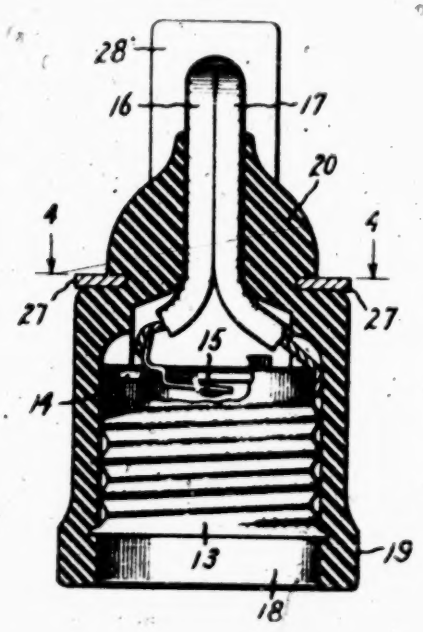


Fig. 3.



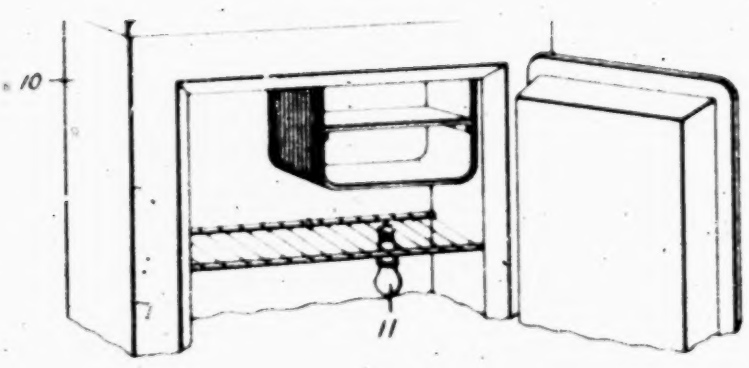


Fig. 2.

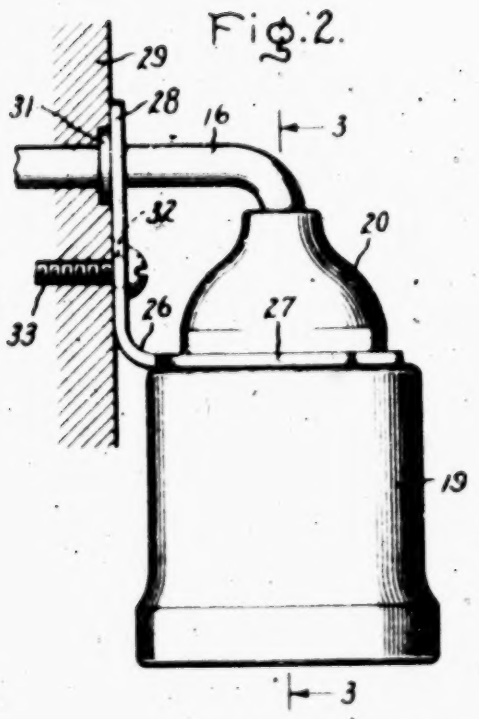


Fig. 3.

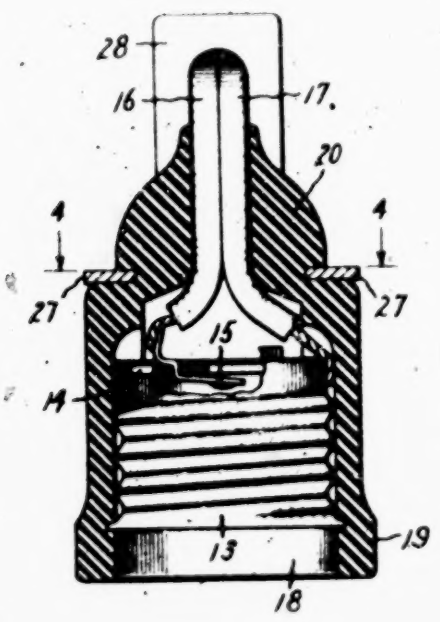


Fig. 4.

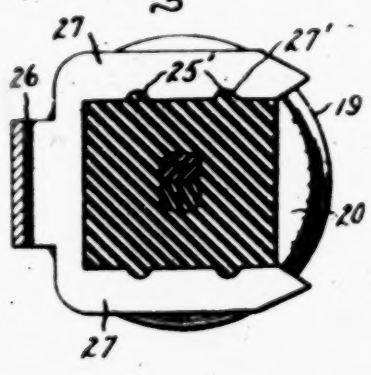


Fig. 5.

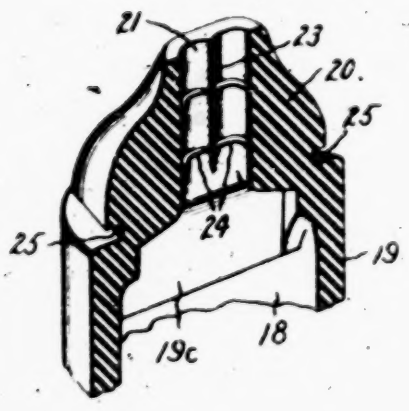


Fig. 6.

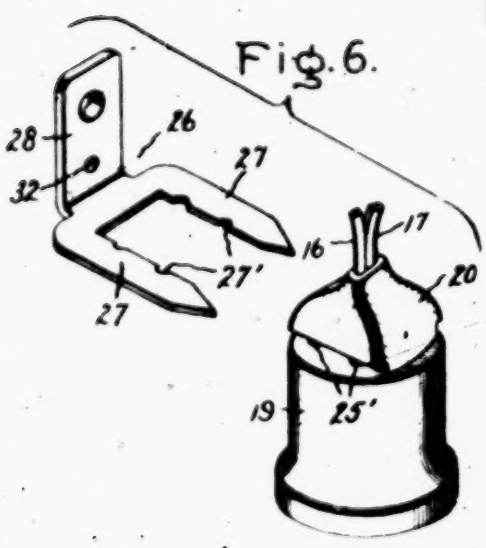
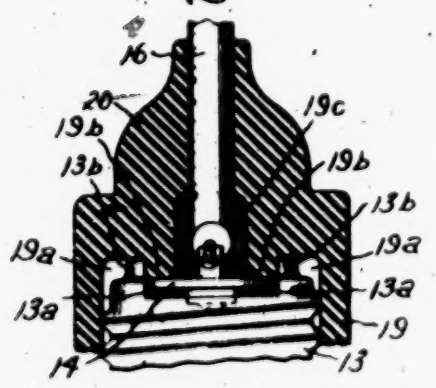


Fig. 7.



Inventor:
Ralph C. Welch,
by Harry E. Dunham
His Attorney.

Patented Mar. 24, 1942

2,277,468

UNITED STATES PATENT OFFICE

2,277,468

LAMP-HOLDER ASSEMBLY

Ralph C. Welch, Devon, Conn., assignor to General Electric Company, a corporation of New York

Application January 4, 1940, Serial No. 312,400

1 Claim. (Cl. 240—52)

My invention relates to a lampholder assembly for mounting in a refrigerator or the like.

The object of my invention is the provision of a lampholder supporting means whereby the lampholder may be easily and securely supported on a wall, for example the wall of a refrigerator.

In the accompanying drawing Fig. 1 is a view showing my lampholder mounted in the interior of a refrigerator cabinet; Fig. 2 is an elevational view of the lampholder; Fig. 3 is a sectional view along the line 3—3 of Fig. 2; Fig. 4 is another sectional view along the line 4—4 of Fig. 3; Fig. 5 is a perspective view, partly in section, of a portion of the lampholder; Fig. 6 is a perspective view of the lampholder and mounting means, and Fig. 7 is another sectional view thru the lampholder at right angles to the showing of Fig. 3

Referring to the drawing, Fig. 1 illustrates a refrigerator cabinet 10 with a light 11 for illuminating the interior of the refrigerator. The light 11 is supported by a lampholder and mounting means assembled together and constructed in accordance with my invention. Such assemblies should be of small size in order to reduce the amount of space taken up within the refrigerator cabinet and of shatter-proof construction so as not to be damaged by heavy or sharp objects placed within the refrigerator. In addition the lampholder should be of waterproof construction and the connection to the conducting wires should likewise be capable of resisting moisture which is normally present in the interior of a refrigerator. It is also desirable to so construct the lampholder and mounting means that they may be easily and quickly assembled within the refrigerator cabinet. In the instant case the mounting means is in the nature of a clip on which the lampholder is frictionally secured in position.

Referring to Fig. 3 of the drawing, my lampholder includes a threaded screw shell 13 having an insulating disk 14 at the bottom of the shell for the reception of a center contact 15, the center contact and screw shell forming socket means for the reception of the light 11. The center contact 15 and screw shell 13 are connected to conductors 16 and 17, respectively, of a lamp cord, by any suitable fastening means, such as solder. This assembly is placed within the interior 18 of an insulating casing 19 of rubber, or the like. In order to hold the assembled lamp receptacle and conductor securely in position the rubber casing is made resilient so that it closely and frictionally engages these elements. This prevents the infiltration of moisture to a point where it may corrode or damage the connections between the conductors and receptacle elements or cause short circuits. By making the casing of resilient material the lampholder is not subject to breakage or damage by contact with heavy objects within the refrigerator. In order to prevent rotation of the screw shell as a lamp is threaded therein, the bottom of the shell adjacent the disk 14 is slotted to provide, in effect, abutment surfaces 13a formed by projections 13b extending from the body of the shell into recesses 19a in the bottom of the casing, the latter being formed by spaced projections 19b and the wall of the shell. The abutment surfaces 13a engage the projections 19b, as shown by Fig. 7. The disk 14 rests on the projections 19b which are spaced apart to form a channel 19c for receiving the center contact and the conductors.

In order to seal the entrance of the conductors into the interior of the casing 19, the latter is provided with an extending neck portion 20 of relatively heavy cross-section, the neck portion being provided with an opening 21 merging with channel 19c, the opening being divided by a rib 23 and with one or more transverse ridges 24. Inasmuch as the conducting wires 16 and 17 form the parallel wires of a rubber insulated conductor, they seat themselves within the opening 21, so that the rib 23 is disposed in the groove in the conductor between the parallel wires while, at the same time, the transverse ribs 24 closely engage the outer rubber covering of the conductors and, together with the rib 23, make an effective and water-tight joint between the casing 19 and the conductors. The ribs 23 and 24 are held in engagement firmly with the conductors by virtue of the fact that the neck portion 20 of the casing is formed of resilient rubber. Since the opening 21 is slightly smaller than the overall diameter of the conductors, the walls of the openings and the rib and ridges are pressed down and resiliently held in close engagement with the outer coverings of the conductors. This construction has been found very effective in preventing the entry of moisture or water into the interior of the lampholder through the opening formed by the connection with the electric feed wires. In some cases, a conductor having a smooth jacket may be employed; this means that the rib 23 and ridges 24 may be omitted. The lamp holder thus far described is disclosed and claimed in my copending application for Lamp holders, Serial No. 412,321, filed September 25,

1941 and assigned to the same assignee as the instant application.

Between the neck portion 20 and the body portion of the lampholder a groove 25 is formed which extends on two sides of the periphery of the lampholder casing for the reception of a holding means or mounting bracket 26. This bracket is of angular formation having arms 27 and 28 for engagement with the casing 19 and a wall 29 of the refrigerator, respectively. For gripping the casing of the lampholder the arm 27 is bifurcated to provide arms which are seated within the grooves 25 of the casing, so that the lampholder is securely mounted in position by frictional engagement with the arm 27. The frictional grip of the arms is increased by the indentations 27' which receive cooperating projections 25' in the groove 25. Here again, the resiliency of the casing 19 makes it possible to quickly mount the lampholder in position simply by forcing it over the bifurcated arm 27 into the position shown by Fig. 2. This makes for speed of assembly.

The other end of the bracket 26 is formed with a flanged opening 31 for receiving the conductors 16 and 17 and with a second opening 32 for the reception of any suitable fastening means, such as the screw 33. The flange of the opening 31 may be seated within a recess in the wall and, together with the screw 33, forms an effective means of holding the bracket 26 in position, preventing rotation of the arm about the surface of the wall. In addition, the flange forms a bushing for leading the conductors through the wall.

When in mounted position the neck portion 20 of the lampholder is located in the space defined by the arms of the bracket 26 in such a manner that the conductors 16 and 17 may be led directly through the opening 31 in the bracket to the exterior of the cabinet wall. This reduces the space occupied by the lampholder.

What I claim as new and desire to secure by Letters Patent of the United States, is:

In an assembly for mounting a lampholder on a wall, a bracket having angularly extending arms, one of said arms being bifurcated to form spaced clamping jaws extending outwardly from the wall, the other arm lying parallel with the wall and being provided with an opening for a fastening means and a flanged opening for receiving a conductor and serving as a bushing therefor, a lampholder having socket means connected to the conductor and provided with a casing of resilient insulating material for engaging said clamping jaws whereby said lampholder is resiliently held in the space formed by the bifurcated jaws, the flange of the flanged opening being adapted to be received in the wall to prevent rotation of the bracket.

RALPH C. WELCH.

from said first mentioned groove toward the open end of the casing, a projecting shoulder rigidly formed on the socket and extending a substantial distance outwardly of the cylindrical confines thereof, said shoulder engaging in said first mentioned groove, said casing being stretchable within certain limits to permit removal and insertion of the socket.

11. In an article of the class described, an electrical connector comprising a conducting shell of generally cylindrical configuration, a flexible open-ended casing of rubber-like material having an interior cylindrical space therein relatively closely accommodating said shell for support thereof, a groove formed on the interior side wall of said casing and extending in a direction parallel to the axis of said cylindrical shell, a projecting shoulder rigidly formed on the shell and extending a substantial distance outwardly of the cylindrical confines thereof, said shoulder engaging in said groove, the said groove being provided with a shoulder intermediate of said first named shoulder and said open end of the casing, said second named shoulder extending axially inwardly beyond said first named shoulder to retain the socket axially within the casing, and a guide groove extending longitudinally from said first named groove toward the open end of the casing.

FRANCIS C. KOLLATH.